

STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT


Entergy Mississippi, Inc.
Gerald Andrus Steam Electric Plant
Highway 82 West
Greenville, Mississippi
Washington County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and 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.

Permit Issued: September 7, 2004

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: August 31, 2009

Permit No.: 2800-00048

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SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)
- 1.2 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 this permit. (Ref.: APC-S-6, Section III.A.6.b.)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)
- 1.5 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 permittee or, for information to be confidential, the permittee shall furnish such records to 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-6, Section III.A.6.e.)
- 1.6 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this 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-6, Section III.A.5.)
- 1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters,

such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgements where such judgements are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)
- (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)
- (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)

- 1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)
- 1.9 Any application form, report, or compliance certification required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)
- 1.10 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)
- 1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))
- 1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))
- 1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)
- 1.14 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;

- (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)
- 1.15 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)
- 1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)

- 1.18 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)
- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
- (a) routine maintenance, repair, and replacement;
 - (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
 - (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
 - (f) any change in ownership of the stationary source."

- 1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)
- 1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)
- 1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
 - (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
 - (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)
- 1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.
- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.

- (a) Upsets (as defined by APC-S-1, Section 2.34)
 - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;

- (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.31 & 2.26)
- (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
 - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
 - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
 - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
 - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
 - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.
- (c) Maintenance.
- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with

emission standards, or other regulatory requirements if the permittee can demonstrate the following:

- (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)

1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	7275 MMBtu/hr, Natural Gas, No. 2 Fuel Oil, and No. 6 Fuel Oil Fired Babcock and Wilcox Utility Boiler (Plant Gerald Andrus Reference C1, Unit #1).
AB-001	230 MMBtu/hr, Natural Gas, No. 2 Fuel Oil, and No. 6 Fuel Oil Fired Boiler (Plant Gerald Andrus Reference C1, Auxiliary Boiler #1).
AC-001	230 MMBtu/hr, Natural Gas, No. 2 Fuel Oil, and No. 6 Fuel Oil Fired Boiler (Plant Gerald Andrus Reference C1, Auxiliary Boiler #2).
AA-002	800 hp (5.6 MMBtu/hr), Diesel Fired Internal Combustion Engine (Plant Gerald Andrus Reference C4, Emergency Generator).
AA-003	250 hp (1.75 MMBtu/hr), Diesel Fired Internal Combustion Engine (Plant Gerald Andrus Reference C5, Fire Pump Engine).
AA-004	150 hp (1.05 MMBtu/hr), Diesel Fired Internal Combustion Engine (Plant Gerald Andrus Reference C6, Car Wash Engine).
AA-005	90 MMBTU/hr No. 2 Fuel Oil and Natural Gas Fired Temporary Auxiliary Boiler

Note: Emission Points AA-001, AB-001, AC-001 and AA-005 share a common stack.

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: APC-S-1, Section 3.1)
- 3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: APC-S-1, Section 3.2)
- 3.A.3 No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. (Ref.: APC-S-6, Section III.A.4.(a))**
- 3.A.4 Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator and the DEQ.
(Ref.: APC-S-6, Section III.A.1.(b))**

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	40 CFR 72	8.1		Acid Rain Permit
	APC-S-1, Section 3.4 (a)(2)	3.B.3 & 1.19	PM	0.20 lbs/MMBTU or as otherwise limited by facility restrictions
AB-001	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	APC-S-1, Section 3.4 (a)(2)	3.B.3 & 1.19	PM	0.36 lbs/MMBTU or as otherwise limited by facility restrictions
AC-001	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	APC-S-1, Section 3.4 (a)(2)	3.B.3 & 1.19	PM	0.36 lbs/MMBTU or as otherwise limited by facility restrictions
AA-002	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	APC-S-1, Section 3.4 (a)(1)	3.B.2 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility restrictions
AA-003	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	APC-S-1, Section 3.4 (a)(1)	3.B.2 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility restrictions
AA-004	APC-S-1, Section 4.1(a)	3.B.1 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility restrictions
	APC-S-1, Section 3.4 (a)(1)	3.B.2 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility restrictions
AA-005	40 CFR 60.42(c)(d)	3.B.5 & 1.19	SO ₂	0.5% weight percent sulfur for fuel oil, or as otherwise limited by facility restrictions
		3.B.6	Hours of Operation	2880 hrs/year based on a 12-month rolling total.
		3.B.5	Fuel Restriction	Limited to natural gas and 0.25% maximum weight percent sulfur while burning fuel oil
	40 CFR 60.43(c)(c)	3.B.4	Opacity	Less than 20% as referenced by EPA Reference Method 9
AB-001 & AC-001	40 CFR 63, Subpart DDDDD	3.B.7	HAP	Subject to the initial notification requirements in §63.9(b). The unit is not required to meet any other requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A.
AA-005	40 CFR 63, Subpart DDDDD	3.B.8	HAP	Definition of temporary boiler only. Unit exempt from the subpart.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-002	40 CFR 63, Subpart ZZZZ	3.B.9	HAP	MACT applicability only. The unit is not required to meet any requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A.

**3.B.1. Except as otherwise specified or limited herein, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.
(Ref.: APC-S-1, Section 4.1(a))**

**3.B.2. Except as otherwise specified or limited herein, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.
(Ref.: APC-S-1, Section 3.4 (a)(1))**

3.B.3. Except as otherwise specified or limited herein, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship

$$E=0.8808*(I)-0.1667$$

**where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.
(Ref.: APC-S-1, Section 3.4(a)(2))**

**3.B.4. For Emission Point AA-005, the permittee is limited to 20% opacity as determined by EPA Reference Method 9, 40 CFR 60, Appendix A.
(Ref.: 40 CFR 60.63c(c))**

**3.B.5. For Emission Point AA-005, the permittee is limited to burning only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.25% weight percent.
(Ref.: 40 CFR 60.42c(d) has a sulfur weight percent limit of 0.5%, but the facility chooses a limit of 0.25% to achieve increased hours of operation.)**

3.B.6 For Emission Point AA-005, the permittee is limited to 2880 hours of operation per year based on a 12-month rolling total.

3.B.7 Emission Points AB-001 and AC-001 are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. These units are existing

large liquid fuel units as defined in the standard and are only subject to the initial notification requirements in §63.9(b). The units are not required to meet any other requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A. (Ref.: 40 CFR §63.7485, 63.7506(b) and 63.7575)

3.B.8 Emission Point AA-005 meets the definition of temporary boiler as defined in 63.7575. Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive period. Since AA-005 meets the definition of temporary boiler, it is not subject to 40 CFR Subpart DDDDD. (Ref.: 40 CFR 63.7491)

3.B.9 Emission Point AA-002 is subject to the National Emission Standards for Hazardous Air Pollutants for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. This unit satisfies the definition of a stationary RICE that is an existing compression ignition unit and is not required to meet the requirements of this standard or General Provisions, 40 CFR Part 63, Subpart A.

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
APC-S-1, Section 3.4 (a)(1)	3.B.2 1.19	PM	0.6 lb/MMBtu or As otherwise limited by facility modification restrictions
APC-S-1, Section 4.1 (a)	3.B.1 1.19	SO ₂	4.8 lb/MMBtu or As otherwise limited by facility modification restrictions
APC-S-1, Section 3.6 (a)	3.C.1 1.19	PM	$E=4.1(p)^{0.67}$ or As otherwise limited by facility modification restrictions

3.C.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship

$$E = 4.1 (p)^{0.67}$$

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. If the process weight rate (p) changes, the emissions rate (E) will change correspondingly. (Ref.: APC-S-1, Section 3.6 (a))

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 5.A.3 Except as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by September 1 and March 1 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: APC-S-6, Section III.A.3.c.(2))
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission

monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.

- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

B. Specific Monitoring and Recordkeeping Requirements

- 5.B.1 For Emission Points AA-001, AB-001, and AC-001, the permittee shall keep records of all fuels burned. These records shall consist of fuel type, quality and quantity, and the heating value (Btu/gal or Btu/ft³). Additionally, when burning fuel oil, the permittee shall maintain records to document the sulfur content (% by weight) for fuel oil burned on a daily basis or for each lot or shipment received.
- 5.B.2 The permittee shall test Emission Point AA-001 for particulate matter using EPA Test Method 5, and sulfur dioxide using EPA Test Methods 6C or 19, within sixty (60) days of burning No. 6 fuel oil for four (4) consecutive days. All testing is to be done while the facility is burning No. 6 fuel oil. After the initial test for particulate matter and sulfur dioxide, the permittee shall perform these tests within sixty (60) days of burning No. 6 fuel oil for four (4) consecutive days biennially.
- 5.B.3 The permittee shall test Emission Point AA-001 for sulfuric acid mist using EPA Test Method 8, within sixty (60) days of burning No. 6 fuel oil for four (4) consecutive days. All testing is to be done while the facility is burning No. 6 fuel oil. After the initial test for sulfuric acid mist, the permittee shall perform this test within sixty (60) days of burning No. 6 fuel oil for four (4) consecutive days biennially. The permittee may perform the testing for sulfur dioxide emissions required under 5.B.2 in conjunction with performing this test utilizing EPA Test Method 8 methodology. (Ref.:APC-S-2, Section II.B.12)
- 5.B.4 For Emission Point AA-005, the permittee shall sample the existing fuel oil bulk storage tank for percent sulfur and also sample the fuel tank after each new shipment to demonstrate that the oil contains 0.25% weight percent sulfur or less. These records shall consist of fuel type, quality and quantity, and the heating value (BTU/gal or BTU/ft³). Additionally, when burning fuel oil, the permittee shall maintain records to document the sulfur content (% by weight) for fuel oil burned on a daily basis or for each lot or shipment received.
- 5.B.5 For Emission Point AA-005, the permittee shall monitor and record hours of operation on a daily basis and on a 12-month rolling total. All records requested by this permit shall be maintained for review by Office of Pollution Control personnel for at least five (5) years from the date of operation.
- 5.B.6 Emission Point AA-005 is subject to the requirements of 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam

Generating Units. This emission point is also subject to 40 CFR 60, Subpart A, the notification and recordkeeping requirements.

C. Specific Reporting Requirements

- 5.C.1** For Emission Points AA-001, AB-001, and AC-001, the permittee shall submit fuel usage reports in accordance with Paragraph 5.A.4. These reports should include fuel type, quantity and quality, including the sulfur content (% by weight), and the heating value (Btu/gal) of all fuels burned.
- 5.C.2** The permittee shall submit a test report for each emission point identified in Paragraph 5.B.2 within thirty (30) days after the testing is complete.
- 5.C.3** The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) for testing under 5.B.2 to ensure that all test methods and procedures are acceptable to the DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.
- 5.C.4** For Emission Point AA-005, the permittee shall submit semi-annual reports showing the hours of operation on a daily basis and a 12-month rolling total, and the sulfur content of fuel after each new shipment. The permittee shall submit these reports by September 1 and March 1 of each calendar year. The permittee shall also submit quarterly reports as specified in 40 CFR 60.48(c)(d) for fuel oil sulfur limits.
- 5.C.5** For Emission Point AA-005, the fuel oil sulfur limits apply at all times as specified in 40 CFR 60.42(c)(i).

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act. The full text of the referenced regulations is contained in Appendix B to this permit.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to § 82.106.
 - (b) The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - (d) No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to § 82.166. ("MVAC - like appliance" is defined at § 82.152.)
 - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

- (f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.
- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

SECTION 8. TITLE IV REQUIREMENTS

- 8.1 **The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as Appendix B of this permit. All conditions of the Phase II Acid Rain Permit are effective for the dates as specified in the Acid Rain Permit. However, these conditions may be revised by the MDEQ during the permitted period.
(Ref.: 40 CFR 72)**

APPENDIX A

List of Abbreviations Used In this Permit

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
APC-S-7	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 Fm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

40 CFR 82

PROTECTION OF STRATOSPHERIC OZONE

APPENDIX C

PHASE II ACID RAIN PERMIT

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, Inc. - Plant Gerald Andrus
Operated by: Entergy Mississippi, Inc.
Effective: September 7, 2004 through August 31, 2009.

Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the DEQ. This is the initial permitting action being undertaken:

- | | | |
|----|--------------------------|--------------------|
| 1) | Draft permit: | May 30, 1997 |
| 2) | Initial Permit Issuance: | September 12, 1997 |

Present Action:

- | | | |
|----|---|-------------------|
| 1) | Draft permit for public and EPA comment for permit renewal: | June 8, 2004 |
| 2) | Permit Renewal: | September 7, 2004 |

Signature	Date
-----------	------

Jerry Cain

Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385

Telephone: (601) 961-5073 Facsimile: (601) 961-5703

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, Inc.- Plant Gerald Andrus
Operated by: Entergy Mississippi, Inc.
ORIS code: 8054
Effective: September 7, 2004 through August 31, 2009

ACID RAIN PERMIT CONTENTS:

- 1. Statement of Basis.**
- 2. SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.**
- 3. Comments, notes, and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.**
- 4. The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.**

1) STATEMENT OF BASIS:

Statutory and Regulatory Authorities: In accordance with the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. §§ 49-17-1 through 49-17-43, and any subsequent amendments, and Titles IV and V of the Clean Air Act, the Mississippi Department of Environmental Quality issues this permit pursuant to the State of Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, Regulation APC-S-6, and the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act, Regulation APC-S-7.

2). SO₂ ALLOWANCE ALLOCATIONS AND NO_x REQUIREMENTS FOR EACH AFFECTED UNIT:

		2004	2005	2006	2007	2008
Unit 1	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	3282	3282	3282	3282	3282
	NO _x limit	NA				

3) COMMENTS, NOTES AND JUSTIFICATIONS: All affected units are natural gas/#2 fuel oil/#6 fuel oil-fired units; therefore, the affected units are not subject to the NO_x requirements outlined in 40 CFR Part 76.

4) PHASE II PERMIT APPLICATION: Attached

APPENDIX D

40 CFR 63, Subpart DDDDD

**National Emission Standards for Hazardous Air Pollutants for
Industrial, Commercial, and Institutional Boilers and Process Heaters**

APPENDIX E

40 CFR 63, Subpart *ZZZZ*

**National Emission Standards for Hazardous Air Pollutants for
Stationary Reciprocating Internal Combustion Engines**

