STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Tennessee Valley Authority, TVA, Kemper Combustion Turbine Plant
1363 Mark Cobb Road
DeKalb, Mississippi
Kemper 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: MAR 2 2 2010

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: FEB 2 8 2015

Permit No.: 1380-00015

15543 PER20090001

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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 document 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 2.37)

(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 2.34 & 2.29)

(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	The 1,278 MMBTUH GE Combustion Turbine, CT-1 with equipment for evaporative inlet fogging, dry low NO_x burners for firing of natural gas, and

Emission Point	Description
	water injection for firing of fuel oil.
AA-002	The 1,278 MMBTUH GE Combustion Turbine, CT-2 with equipment for evaporative inlet fogging, dry low NO_x burners for firing of natural gas, and water injection for firing of fuel oil.
AA-003	The 1,278 MMBTUH GE Combustion Turbine, CT-3 with equipment for evaporative inlet fogging, dry low NO_x burners for firing of natural gas, and water injection for firing of fuel oil.
AA-004	The 1,278 MMBTUH GE Combustion Turbine, CT-4 with equipment for evaporative inlet fogging, dry low NO_x burners for firing of natural gas, and water injection for firing of fuel oil.
AA-005	The 7.78 MMBTUH GTS Energy Gas Heater, GH-1. (insignificant)
AA-006	The 7.78 MMBTUH GTS Energy Gas Heater, GH-2. (insignificant)
AA-007	The 250 hp Caterpillar, diesel fired, emergency fire water pump (insignificant).
AA-008	The 2,016,000 gallon, No. 2 fuel oil, fixed roof storage vessel (insignificant).
AA-009	The 2,016,000 gallon, No. 2 fuel oil, fixed roof storage vessel (insignificant).

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)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004	40 CFR 72-78 Acid Rain Permit Issued: Month Date Year	3.B.1	Acid Rain	Acid Rain Program Regulations as specified in 40 CFR 72-78
	40 CFR 60.330 – Subpart GG for Stationary Gas Turbines	3.B.2	SO_2 NOx	New Source Performance Standards at 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines.
	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004	3.B.3	Startup/ Shutdown	The short term (lbs/hr and PPM) limits do not apply during periods of startup and shutdown. However, the permittee shall meet tons/year emission limit including emissions during periods of startup and shutdown.
		3.B.4	Fuel Switching	The short term (lbs/hr and PPM) limits do not apply during periods of fuel switching. However, the permittee shall meet tons/year emission limit including emissions during periods of fuel switching.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
		3.B.5	Operating Period	For the purposes of the turbine emission limitations below, a 24-hour operating period is defined as 24 hours of valid, non-exempted CEM data.
		3.B.6	Fuel Restriction	The permittee shall fire natural gas or No. 2 fuel oil only.
		3.B.7	Fuel Oil Sulfur Content	Sulfur content of 0.05% by weight or less
		3.B.8	Fuel Firing Mode	May fire natural gas during Base and Peak Mode Operation. May fire fuel oil only during Base Mode Operation.
AA-001 AA-002 AA-003 AA-004		3.B.9	PM/PM_{10}	While firing natural gas 7.35 lbs/hr for each turbine; While firing fuel oil 15.80 lbs/hr for each turbine; Total from all four turbines not to exceed 54.40 tons/year in both natural gas and fuel oil firing modes combined.
	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004	3.B.9	SO_2	While firing natural gas 4.35 lbs/hr for each turbine; While firing fuel oil 59.0 lbs/hr for each turbine; Total from all four turbines not to exceed 118.10 tons/year in both natural gas and fuel oil firing modes combined.
		3.B.9	NOx	While firing natural gas 12 PPM at 15% oxygen on a dry basis, not to exceed 82.40 lbs/hr for each turbine, both limits are based on a 24-hour operating period; While firing fuel oil 42 PPM at 15% oxygen on a dry basis, not to exceed 204 lbs/hr for each turbine, both limits are based on a 24-hour operating period;

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004			Total from all four turbines not to exceed 546.0 tons/year in both natural gas and fuel oil firing modes combined.
		3.B.9	CO	While firing natural gas 25 PPM at 15% oxygen, not to exceed 64.2 lbs/hr for each turbine, both limits are based on a 24-hour operating period; While firing fuel oil 20 PPM at 15% oxygen, not to exceed 51.60 lbs/hr for each turbine, both limits are based on a 24-hour operating period Total from all four turbines not to exceed 323.30 tons/year in both natural gas and fuel oil firing modes combined.
		3.B.9	VOC	While firing natural gas 7.0 lbs/hr for each turbine, based on a 24-hour operating period While firing fuel oil 7.0 lbs/hr for each turbine, based on a 24-hour operating period Total from all four turbines not to exceed 36.8 tons/year in both natural gas and fuel oil firing modes combined.
		3.B.9	Opacity	10%
		3.B.10	Annual Heat Input Restriction	The permittee shall not have a heat input of more than 12,950,784 MMBTU per year with up to 4,306,426 MMBTU heat input per year provided using fuel oil operation, both on a 12 month rolling total.
		3.B.11	BACT-Good Operation Practices	The permittee shall operate the combustion turbines in a manner consistent with good air pollution control practices to minimize emissions during startup and shutdowns. This operation shall occur in accordance with the manufacturer's written instructions or other written instructions developed and maintained by the permittee which shall include review of the operating parameters of the unit during startup or shutdowns as necessary to make adjustments to reduce or eliminate excess emissions.

3.B.1 The permittee is subject to the Acid Rain Program Regulations as specified in 40 CFR 72-78 and the permittee must comply with all applicable requirements of this standard. The Acid Rain Permit (ORIS code 07923) is attached to this permit in Appendix B.

3.B.2 For Emission Points AA-001 through AA-004, the combustion turbines are subject to and shall comply with all applicable requirements of the New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60, Subpart GG.

3.B.3 For Emission Points AA-001 through AA-004, the short term (lb/hr and PPM) limits do not apply during periods of startup and shutdown. However, the permittee shall meet the long term (tons/year) limit including emissions during periods of startup and shutdown.

Startup shall include both normal startup and return to service after a maintenance outage. Normal startup is defined as the period beginning with initial ignition of fuel in the unit and ending 21 minutes after synchronization of the unit to the grid. Return to service after a maintenance outage is defined as the period beginning with initial ignition of fuel in the unit following a planned or forced maintenance outage and ending 120 minutes after synchronization of the unit to the grid. Shutdown is defined as the 25 minute period immediately prior to cessation of ignition of fuel in the unit.

3.B.4 For Emission Points AA-001, through AA-004, the short term (lbs/hr and PPM) limits do not apply during periods of fuel switching. However, the permittee shall meet the tons/year emission limit including emissions during periods of fuel switching.

For fuel oil to natural gas operations, a fuel switch is defined as the 15 minute period commencing when the water injection system is shut off after a turbine has decreased load to accommodate the fuel switch. For natural gas to fuel oil operations, a fuel switch is defined as the 15 minute period commencing with the actual fuel switch activity.

The permittee shall be limited to no more than four (4) fuel switching events per emission point per day; each daily period beginning at midnight and ending at 11:59 pm of the same calendar day.

3.B.5 For Emission Points AA-001 through AA-004, and for the purposes of the emission limitations below, a 24-hour operating period is defined as 24 hours of valid, non-exempted CEM data.

3.B.6 For Emission Points AA-001 through AA-004, the permittee shall fire natural gas or No. 2 fuel oil only.

3.B.7 For Emission Points AA-001 through AA-004, the permittee shall fire fuel oil with a sulfur content of 0.05% by weight or less.

3.B.8 For Emission Points AA-001 through AA-004, the permittee may fire natural gas during Base and Peak Mode Operation. The permittee may fire fuel oil only during Base Mode Operation.

Peak mode and base mode operation shall be defined according to the manufacturer's specifications.

3.B.9 For Emission Points AA-001 through AA-004, the permittee shall be limited to the short-term (lb/hr and ppmv) and long-term (tpy) emission limits enumerated in the table above for PM, PM_{10}, SO_2, NO_x, CO, VOC and Opacity.

3.B.10 For Emission Points AA-001 through AA-004, the permitee shall not have a total heat input of more than 12,950,784 MMBUT per year with up to 4,306,426 MMBTU heat input per year provided using fuel oil operation, both on a 12 month rolling total.

3.B.11 For Emission Points AA-001 through AA-004, as established through the BACT review for good operating practices, the permittee shall operate the combustion turbines in a manner consistent with good air pollution control practices to minimize emissions during startup and shutdowns. This operation shall occur in accordance with the manufacturer's written instructions or other written instructions developed and maintained by the permittee which shall include review of the operating parameters of the unit during startup or shutdowns as necessary to make adjustments to reduce or eliminate excess emissions.

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.C.1 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
APC-S-1, Secrtion3.6(a)	3.C.3 & 1.19	PM	$E = 4.1\ p^{0.67}$ or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2 &	SO_2	4.8 lbs/MMBTU or

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	1.19		as otherwise limited by facility modification restrictions
Emission Point AA-007 Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004	3.C.4	Operational Restriction	50 hours/year
	3.C.5	Fuel Type and Sulfur Content	No. 2 Diesel Fuel Only with a maximum sulfur content of 0.05% sulfur by weight
Emission Points AA-005 and AA-006 Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004	3.A.1 3.A.2	Opacity	40%
	3.C.6	Annual Fuel Restriction	The permittee shall not burn more than 42,900,000 standard cubic feet of natural gas per year on a 12 month rolling total for the two emission points combined

3.C.1 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.

3.C.2 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.

3.C.3 The maximum permissible emission of particulate matter shall not exceed in one hour the total quantities determined by the relationship:

$$E = 4.1\ p^{0.67}$$

Where E is the emission rate in lb/hr and p is the process weight input in tons/hr.

3.C.4 For Emission Point AA-007 - the emergency fire water pump, the permittee shall limit operation to a maximum of 50 engine hours per year on a 12 month rolling total.

3.C.5 For Emission Point AA-007 - the emergency fire water pump, the permittee shall fire No. 2 diesel fuel only with a maximum sulfur content of 0.05% sulfur by weight.

3.C.6 For Emission Points AA-005 and AA-006, the permittee shall not burn more than 42,900,000 standard cubic feet of natural gas per year on a 12 month rolling total for the two emission points combined.

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 July 31 and January 31 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

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001 AA-002 AA-003 AA-004	NSPS Subpart GG Testing	Comply with the requirements listed in 40 CFR 60, Subpart GG, Section 60.335	5.B.1	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004 40 CFR 60.7 – Subpart A General Provisions for Notifications 40 CFR 60.330 – Subpart GG for Stationary Gas Turbines 40 CFR 72-78 Acid Rain Permit Issued: January 2, 2002
	Startup, shutdown, or malfunction	Keep a record of the duration of all startups or shutdowns of the combustion turbines. These records shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request.	5.B.2	
	Fuel Switching	Keep a record of all fuel switches of the combustion turbines. These records shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request.	5.B.3	
	Monitoring of Mode of Operation and Type of Fuel Fired	Keep a monthly record of the total number of hours the units operated in both the peak mode and base mode while firing natural gas.	5.B.4	
	Monitoring for Annual Heat Input	Keep a monthly record tabulating the total heat input for each firing mode and type of fuel fired on a daily basis and on a 12-month rolling total.	5.B.5	
	Monitoring for SO_2	Comply with the SO_2 monitoring requirements under 40 CFR 60, Subpart GG, Section 60.334	5.B.6	

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
	Stack Testing for NO_x and CO	Demonstrate compliance with nitrogen oxide and carbon monoxide emission limitations by stack testing in accordance with EPA Reference Method 20 and 10 and the test methods and procedures listed in 40 CFR 60.335 or their approved equivalents and submittal of a stack test report within 180 days of startup, but no later than 60 days of attaining maximum production rate and biennially thereafter. Demonstrating compliance with NO_X and CO limits using CEMs data in lieu of EPA Reference Methods is an acceptable practice provided that the permittee meets the guidelines established in EPA's general guidance on "Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated under New Source Performance Standards".	5.B.7	
AA-001 AA-002 AA-003 AA-004	Monitoring for NO_x	Install, calibrate, maintain and operate continuous monitoring systems for NO_X (as specified in 40 CFR 60.334, Appendix B and 40 CFR 75), The monitoring systems must comply with all applicable requirements specified in 60.334, 60.13, and Appendix B of 40 CFR 60 and 40 CFR 75. In addition, the permittee must comply with the reporting and recordkeeping requirements specified in 40 CFR 60.7 and 40 CFR 75.	5.B.8	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004 40 CFR 60.7 – Subpart A General Provisions for Notifications 40 CFR 60.330 – Subpart GG for Stationary Gas Turbines 40 CFR 72-78 Acid Rain Permit Issued: January 2, 2002
	Monitoring for CO and O_2	The permittee shall install, calibrate, maintain and operate continuous monitoring systems for CO and O_2 (as specified in 40 CFR 60, Appendix B and Appendix F). The CGA, RA Audits shall be conducted according to 40 CFR 60, Appendix B and F.	5.B.9	
	Monitoring for Annual NO_x and CO Emissions and O_2	NO_x, CO, and O_2 CEM systems shall be capable of and certified to accurately read/measure NO_X and CO concentrations to comply with the tons/year limit.	5.B.10	
AA-005 AA-006	Monitor and Keep Records of Fuel Fired	Monitor and keep records of the amount of natural gas fired on a monthly basis, and a 12-month rolling total basis for each heater	5.B.11	
		Keep records of the combined monthly natural gas usage and the 12-month rolling total for both heaters to demonstrate compliance with the total natural gas usage of 42,900,000 standard cubic feet per year.	5.B.12	
AA-007	Monitor and Keep Records of Operating Time	Monitor and keep records of the engine operating time for the pump on a monthly basis, and a 12-month rolling total basis.	5.B.13	

5.B.1 For Emission Points AA-001 through AA-004, the permittee shall comply with the test methods and procedures requirements listed in 40 CFR 60, Subpart GG, Section 60.335.

5.B.2 For Emission Points AA-001 through AA-004, the permittee shall keep a record of the duration of all startups or shutdowns of the combustion turbines. These records shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request.

5.B.3 For Emission Points AA-001 through AA-004, the permittee shall keep a record of all fuel switches of the combustion turbines. These records shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request.

5.B.4 For Emission Points AA-001 through AA-004, the permittee shall keep a monthly record of the total number of hours the units operated in both the peak mode and base mode while firing natural gas.

5.B.5 For Emission Points AA-001 through AA-004, the permittee shall keep a monthly record tabulating the total heat input for each firing mode and type of fuel fired on a daily basis and on a 12-month rolling total.

5.B.6 For Emission Points AA-001 through AA-004, the permittee shall comply with the SO_2 monitoring requirements under 40 CFR 60, Subpart GG, Section 60.334

5.B.7 For Emission Points AA-001 through AA-004, the permittee shall demonstrate compliance with nitrogen oxide and carbon monoxide emission limitations by stack testing in accordance with EPA Reference Method 20 and 10 and the test methods and procedures listed in 40 CFR 60.335 or their approved equivalents and submittal of a stack test report within 180 days of startup, but no later than 60 days of attaining maximum production rate and biennially thereafter. Demonstrating compliance with NO_X and CO limits using CEMs data in lieu of EPA Reference Methods is an acceptable practice provided that the permittee meets the guidelines established in EPA's general guidance on "Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated under New Source Performance Standards". This includes use of reference method test data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR 75.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least ten (10) days notice should be given so that an observer may be scheduled to witness the test(s).

5.B.8 For Emission Points AA-001 through AA-004, the permittee shall install, calibrate, maintain

and operate continuous monitoring systems for NO_X (as specified in Appendix B and 40 CFR 75). The monitoring systems must comply with all applicable requirements specified in 40 CFR 75 in Appendix B. In addition, the permittee must comply with the reporting and recordkeeping requirements specified in 40 CFR 75.

5.B.9 For Emission Points AA-001 through AA-004, the permittee shall install, calibrate, maintain and operate continuous monitoring systems for CO and O_2 (as specified in 40 CFR 60, Appendix B and Appendix F). The CGA, RA Audits shall be conducted according to 40 CFR 60, Appendix B and F. However, the frequency of the audit shall be as specified in 40 CFR 75, Appendix B, Section 2.2. The RATA required under 40 CFR 60, Appendix F, shall be at the frequency specified in 40 CFR 75, Appendix B, Section 2.3.1 and is as follows:

A calendar quarter that does not qualify as QA operating quarter shall be excluded in determining the deadline for the next RATA. No more that eight successive calendar quarters shall elapse after the quarter in which a RATA was last performed without a subsequent RATA having been conducted. If the RATA has not been completed by the end of the eight calendar quarter since the quarter of the last RATA, then the RATA must be completed within a 720 unit (or stack) operating hour grace period following the end of the eighth successive elapsed calendar quarter. For the diluent monitors RATA may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters.

5.B.10 For Emission Points AA-001 through AA-004, the NO_X, CO, and O_2 CEM systems shall also be capable of and certified to accurately read/measure NO_X and CO concentrations to comply with the tons/year limit. Within 60 days of the date of issuance of this permit [December 10, 2004], the permittee shall submit a data substitution protocol for the CEMs in case of malfunction to calculate the tons/year emissions for NOx and CO as specified. Within 90 days of approval of the protocol, the permittee will commence configuring the Data Acquisition Handling System (DAHS) in accordance with the approved protocol. The permittee will use this data to calculate the tons/year for NOx and CO.

5.B.11 For Emission Points AA-005 and AA-006, the permittee shall monitor and keep records of the amount of natural gas fired on a monthly basis, and a 12-month rolling total basis for each heater.

5.B.12 For Emission Points AA-005 and AA-006, the permittee shall keep records of the combined monthly natural gas usage and the 12-month rolling total for both heaters to demonstrate compliance with the total natural gas usage of 42,900,000 standard cubic feet per year.

5.B.13 For Emission Points AA-007, the permittee shall monitor and keep records of the engine operating time for the pump on a monthly basis, and a 12-month rolling total basis.

C. Specific Reporting Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AA-001 AA-002 AA-003 AA-004	Notification Requirements	Comply with the reporting requirements listed in 40 CFR 60, Subpart A, Section 60.7 and 60.8, Subpart GG, and 40 CFR 75	5.C.1	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: July 30, 2001, and Modified: December 10, 2004 40 CFR 60.7 – Subpart A General Provisions for Notifications 40 CFR 60.330 – Subpart GG for Stationary Gas Turbines 40 CFR 72-78 Acid Rain Permit Issued: January 2, 2002
	Submit NO_x and CO Emissions Data from CEM Systems	Submit semi-annual reports summarizing the results of the NO_X and CO emission rates in tons/year based on a 12-month rolling total.	5.C.2	
	Fuel Sulfur Content	Submit in the semi-annual report a statement that the fuel sulfur content limit is being met.	5.C.3	
	Fuel Type, Mode and Hours of Operation, and Heat Input	Submit semi-annual reports showing the fuel type mode and hours of operation, and total heat input for each firing mode on a daily basis and on a 12-month rolling total.	5.C.4	
AA-005 AA-006		Submit semi-annual reports showing the combined amount of fuel burned on a monthly basis and a 12-month rolling total basis.	5.C.5	

5.C.1 For Emission Points AA-001 through AA-004, the permittee shall comply with the reporting requirements listed in 40 CFR 60, Subpart A, Section 60.7 and 60.8, 40 CFR 60, Subpart GG, and 40 CFR 75.

5.C.2 For Emission Points AA-001 through AA-004, the permittee shall submit semi-annual reports summarizing the results of the NO_X and CO emission rates in tons/year based on a 12-month rolling total.

5.C.3 For Emission Points AA-001 through AA-004, the permittee submit in the semi-annual report a statement that the fuel sulfur content limit is being met.

5.C.4 For Emission Points AA-001 through AA-004, the permittee shall submit semi-annual reports showing the fuel type mode and hours of operation, and total heat input for each firing mode on a daily basis and on a 12-month rolling total.

5.C.5 For Emission Points AA-001 through AA-004, the permittee shall submit semi-annual reports showing the combined amount of fuel burned on a monthly basis and a 12-month rolling total basis.

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 – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at **http://ecfr.gpoaccess.gov** under Title 40, or DEQ shall provide a copy upon request from the permittee.

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations,

persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

SECTION 8. ACID RAIN 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 specified in the Acid Rain Permit; however, these conditions may be revised by the DEQ during the permitted period.

1

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
PHASE II ACID RAIN PERMIT

PHASE II ACID RAIN PERMIT

Issued to: Kemper Plant
Operated by: Tennessee Valley Authority
ORIS code: 07923
Effective: Permit Issuance through Permit Expiration

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 for public and EPA comment.	November 2, 2001
2)	Permit issuance.	January 2, 2002
3)	Draft permit for public and EPA comment for renewal of permit	May 9, 2005
4)	Permit issuance of renewal permit	July 18, 2005
5)	Draft renewal Title V Permit (incorporating Acid Rain Permit) for public and EPA review.	January 29, 2010

Present Action:

1) Permit Issuance

MAR 2 2 2010

Signature Date

Harry M. Wilson, P.E., DEE
Chief, Environmental Permits Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225
Telephone: (601) 961-5171 Facsimile: (601) 961-5742

PHASE II ACID RAIN PERMIT

Issued to: Kemper Plamt
Operated by: Tennessee Valley Authority.
ORIS code: 07923
Effective: Permit Issuance through Permit Expiration

ACID RAIN PERMIT CONTENTS:

1. Statement of Basis.

2. SO_2 allowances allocated under this permit and NOx 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 NOX REQUIREMENTS FOR EACH AFFECTED UNIT:

		2010	2011	2012	2013	2014	2015
KCT1 KCT2 KCT3 KCT4	SO_2 allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	NA	NA	NA	NA	NA	NA
	NOx limit	NA					

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

4). PHASE II PERMIT APPLICATION: Attached