

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Cooperative Energy, a Mississippi Electric Cooperative, Benndale Peaking Station
133 Clark Mizelle Road
Benndale, Mississippi
George County

*Installation of Two 11.4 MW Natural Gas Fired Reciprocating Engines and
Associated Support Equipment*

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: XXXXX

Permit No.: 0840-00014

Draft/Proposed

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)
8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such

records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.)
11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)
12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants." (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)
14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
 - b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions. (Ref.: Miss. Code Ann. 49-17-21)
15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:
 - a) Persistent violation of any of the terms or conditions of this permit;

- b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
or
- c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control. (Ref.: Miss. Code Ann. 49-17-39)
17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B)
18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref. 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)
19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1).)
20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)
21. Beginning Operation: Except as prohibited in Section 1, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)
22. Application for a Permit to Operate: Except as otherwise specified in Section 1, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Section 1, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)
24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to “net” out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)
25. General Duty: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
26. Deviation Reporting: 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) working days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
27. Compliance Testing: Regarding compliance testing:
- a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
 - b) Compliance testing will be performed at the expense of the permittee.
 - c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) detailed description of testing procedures;
 - (2) sample calculation(s);
 - (3) results; and
 - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)
2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)
3. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)
4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with “as built” plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an “as built” application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)

**SECTION 2
EMISSION POINT DESCRIPTION**

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Description
AA-000	Entire Electrical Peaking Station
AA-003	One (1) 11.4 Megawatt (MW) four-stroke, lean burn (4SLB) natural gas fired, non-emergency reciprocating engine – emissions from this unit are controlled using Selective Catalytic Reduction (SCR) and an Oxidation Catalyst
AA-004	One (1) 11.4 Megawatt (MW) four-stroke, lean burn (4SLB) natural gas fired, non-emergency reciprocating engine – emissions from this unit are controlled using Selective Catalytic Reduction (SCR) and an Oxidation Catalyst
AA-005	One (1) 0.43 MMBTU/hr natural gas fired inlet gas heater – this unit is equipped with low NO _x burners
AA-006	One (1) 200 HP (149 kW) emergency diesel fired fire pump
AA-007	One (1) 603 HP (450 kW) emergency diesel fired generator
AA-008	One (1) 333 Gallon diesel fuel storage tank – provides fuel for the emergency generator (AA-007)
AA-009	One (1) 314 Gallon diesel fuel storage tank – provides fuel for the emergency fire pump (AA-006)

**Emission Points AA-001 and AA-002 are an existing natural gas fired combustion turbine and a diesel fired black-start engine, respectively. These Emission Points are being taken offline and are being replaced by the Emission Points outlined in the table above.*

**SECTION 3
EMISSION LIMITATIONS AND STANDARDS**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	Facility-wide opacity limitations
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	NO _x	95.0 tpy
		3.4	CO	
		3.5	VOC	
3.6	HAP	9.0 tpy for any individual HAP 24.0 tpy for all combined HAPs		
AA-003 AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.7	PM/PM ₁₀ <i>(filterable only)</i>	$E = 0.8808 * I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.8	Exhaust Emissions	All emissions shall be routed through control equipment
AA-003 AA-004 AA-006 AA-007	40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (63.6585(a) and (c))	3.9	Exhaust Emissions	Applicability
	40 CFR Part 63, Subpart ZZZZ (63.6590(a)(2)(iii) and 63.6590(c)(1))	3.10		Demonstration of compliance with Part 63, Subpart ZZZZ by compliance with the specified requirements of Part 60, Subpart III or Subpart JJJJ
AA-003 AA-004	40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (60.4233(e), 60.4234, and Table 1 to Subpart JJJJ)	3.11	NO _x CO VOC	<ul style="list-style-type: none"> • 1.0 g/HP-hr • 2.0 g/HP-hr • 0.7 g/HP-hr
AA-005 AA-006 AA-007	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.12	PM/PM ₁₀ <i>(filterable only)</i>	0.6 lb/MMBTU per hour heat input
AA-006	40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (60.4205(c), 60.4206, and Table 4 to Subpart IIII)	3.13	NMHC + NO _x CO PM	<ul style="list-style-type: none"> • 3.0 g/HP-hr • 2.6 g/HP-hr • 0.15 g/HP-hr

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-007	40 CFR Part 60, Subpart III (60.4205(b), 60.4202(a)(2), 89.112(a))	3.14	NMHC + NO _x CO PM	<ul style="list-style-type: none"> • 4.0 g/kW-hr • 3.5 g/kW-hr • 0.2 g/kW-hr
	40 CFR Part 60, Subpart III (60.4205(b), 60.4202(a)(2), 89.113(a))	3.15	Opacity	<ul style="list-style-type: none"> • 20% during acceleration; • 15% during lugging; and • 50% during peaks in either acceleration or lugging
AA-006 AA-007	40 CFR Part 60, Subpart III (60.4207(b) and 80.510(b)(1-2))	3.16	Fuel Requirements	Sulfur content of 15 ppm max., AND Minimum cetane index of 40, OR Maximum aromatic content of 35 volume percent
	40 CFR Part 60, Subpart III (60.4209(a)) 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.17	Exhaust Emissions	Install a non-resettable hour meter prior to initial start-up
	40 CFR 60, Subpart III (40 CFR 60.4211(a)(1-3), (c), and (f)(1-3))	3.18		Emergency engine definition

- 3.1 For the entire facility (Emission Point AA-000), 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. 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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1) and (2).)
- 3.2 For the entire facility (Emission Point AA-000), 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 Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)
- 3.3 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of nitrogen oxides (NO_x) to no more than 95.0 tons per year for each consecutive 12-month period on a rolling basis.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.4 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of carbon monoxide (CO) to no more than 95.0 tons per year for each consecutive 12-month period on a rolling basis.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.5 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of volatile organic compounds (VOC) to no more than 95.0 tons per year for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.6 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of hazardous air pollutants (HAPs) to no more than 9.0 tons per year for any individual HAP and 24.0 tons per year for all combined HAPs for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.7 For Emission Points AA-003 and AA-004, the maximum amount of ash and/or particulate matter from fossil fuel burning installations equal to or greater than 10 MMBTU/hr input but less than 10,000 MMBTU/hr heat input shall not exceed the emission rate as determined by the following relationship:

$$E = 0.8808 * I^{-0.1667}$$

Where E is the emission rate in pounds per MMBTU/hr heat input and I is the heat input in millions of BTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

- 3.8 For Emission Points AA-003 and AA-004, the permittee shall route all exhaust emissions generated by the engines through the post-combustion control equipment at all times during operation, specifically the Selective Catalytic Reduction (SCR) system and the catalytic oxidation system. Any bypass of exhaust emissions around these control systems shall be considered to be a deviation and shall be reported according to the requirements found in Section 1 of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.9 Emission Points AA-003, AA-004, AA-006, and AA-007 are stationary reciprocating internal combustion engines (RICE) located at an area source of HAPs. As such, these engines are subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

(Ref.: 40 CFR 63.6585(a) and (c))

- 3.10 Emission Points AA-003, AA-004, AA-006, and AA-007 are stationary RICE located at an area source of HAP emissions which were constructed after June 12, 2006. As such, these engines are considered to be new stationary RICE and shall demonstrate compliance with the requirements of Subpart ZZZZ by complying with the applicable requirements of 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for Emission Points AA-006 and AA-007 or Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines for Emission Points AA-003 and AA-004.

(Ref.: 40 CFR 63.6590(a)(2)(iii) and 63.6590(c)(1))

- 3.11 For Emission Points AA-003 and AA-004, the permittee shall limit the emission rate of Nitrogen Oxides (NO_x) to no more than 1.0 grams per horsepower-hour (g/HP-hr), the emission rate of Carbon Monoxide (CO) to no more than 2.0 g/HP-hr, and the emission rate of VOC to no more than 0.70 g/HP-hr. The permittee shall meet these emission standards for the entire life of the engine.
(Ref.: 40 CFR 60.4233(e), 60.4234, and Table 1 to Subpart JJJJ)
- 3.12 For Emission Points AA-005, AA-006, and AA-007, the permittee shall limit the particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input to no more than 0.6 pounds per MMBTU per hour heat input.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)
- 3.13 For Emission Point AA-006, the permittee shall limit the emission rate of Non-Methane Hydrocarbons plus NO_x (NMHC+NO_x) to no more than 3.0 g/HP-hr, the emissions rate of CO to no more than 2.6 g/HP-hr, and the emission rate of Particulate Matter (PM) to no more than 0.15 g/HP-hr. The permittee shall meet these emission standards for the entire life of the engine.
(Ref.: 40 CFR 60.4205(c), 60.4206, and Table 4 to Subpart IIII)
- 3.14 For Emission Point AA-007, the permittee shall limit the emission rate of NMHC+NO_x to no more than 4.0 grams per kilowatt-hour (g/kW-hr), the emissions rate of CO to no more than 3.5 g/kW-hr, and the emission rate of Particulate Matter (PM) to no more than 0.20 g/HP-hr. The permittee shall meet these emission standards for the entire life of the engine.
(Ref.: 40 CFR 60.4205(b), 60.4202(a)(2), 60.4206, and 89.112(a))
- 3.15 For Emission Point AA-007, the permittee shall limit the opacity of the exhaust to no more than 20% during the acceleration mode, 15% during the lugging mode, and 50% during the peaks in either the acceleration or lugging modes.
(Ref.: 40 CFR 60.4205(b), 60.4202(a)(2), and 89.113(a))
- 3.16 For Emission Points AA-006 and AA-007, the permittee shall use diesel fuel that meets the following requirements:
- (a) Sulfur content
 - (1) 15 ppm maximum for non-road diesel fuel
 - (b) Cetane index or aromatic content
 - (1) A minimum cetane index of 40; or
 - (2) A maximum aromatic content of 35 volume percent.
- (Ref.: 40 CFR 60.4207(b) and 40 CFR 80.510(c)(1-2))
- 3.17 For Emission Points AA-006 and AA-007, the permittee shall install a non-resettable hour meter prior to the startup of the affected engines.
(Ref.: 40 CFR 60.4209(a) and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.18 For Emission Points AA-006 and AA-007, the permittee shall install, operate, and maintain the engines according to the manufacturer's emission related written instructions, may change only those emissions related settings that are permitted by the manufacturer, and the engines must be certified to meet the emissions limitations contained in Conditions 3.13 and 3.14.

The permittee shall operate the emergency engines in accordance with (a) through (c) below so that the engines may continue to be considered "emergency engines". Any operation other than emergency operation, maintenance and testing, emergency demand response, and 50 hours of operation in non-emergency situations as described in (a) through (c) below is prohibited.

- (a) There is no time limit on the use of the engines in emergency situations.
- (b) The engines may each be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engines. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but such a petition is not required if the permittee keeps records indicating that federal, state, or local standards require maintenance and testing of the engines for more than 100 hours per calendar year.
- (c) The engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing contained in (b). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electrical grid or otherwise supply power as part of a financial agreement with another entity. If the source does have a financial agreement with another entity, the 50 hours of non-emergency operation may be used as long as ALL the conditions in 40 CFR 60.4211(f)(3)(i)(A-E) are met.

If the affected engines do not operate in accordance with the requirements in (a) through (c) above, then the engines will not be considered an emergency engine and must meet all applicable requirements for non-emergency engines.

(Ref.: 40 CFR 60.4211(a)(1-3), (c), and (f)(1-3))

**SECTION 4
WORK PRACTICES**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	Facility-Wide Emissions	Operate all equipment as efficiently as possible

- 4.1 For the entire facility (AA-000), the permittee shall operate and maintain the sources, in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

**SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	NO _x CO VOC HAPs	Monthly recordkeeping requirements
AA-003 AA-004	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.3	Catalyst and SCR Fluid	Monthly recordkeeping requirements
	40 CFR Part 60, Subpart JJJJ (60.4243(b)(2)(ii))	5.4	Exhaust Emissions	Demonstration of compliance
	40 CFR Part 60, Subpart JJJJ (60.4244(a-f))	5.5		Performance testing methodology
	40 CFR Part 60, Subpart JJJJ (60.4245(a))	5.6		Recordkeeping requirements
AA-006 AA-007	40 CFR 60, Subpart III (40 CFR 60.4214(b))	5.7	Exhaust Emissions	Recordkeeping requirements

5.1 The permittee shall retain all required records, monitoring data, supporting information and reports 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 or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit or upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For the entire facility (AA-000), in order to demonstrate compliance emission limitations outlined in Condition 3.3 through Condition 3.6, the permittee shall keep monthly records of the amount of NO_x, CO, VOC, individual HAP, and total combined HAPs emitted, in tons per year, for each calendar month and for each consecutive 12-month period on a rolling basis. The permittee shall also maintain records of all accompanying calculations which were used to determine the amount of each pollutant emitted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.3 For Emission Points AA-003 and AA-004, the permittee shall maintain records of the information outlined in paragraphs (a) through (c) below:

- (a) The date of any maintenance or calibration of the control equipment equipped to the engines, specifically the oxidation catalyst and SCR. In addition, the permittee shall provide a description of what maintenance or calibration activities occurred.
- (b) In the event that the control equipment is bypassed, the permittee shall document the date, time, and duration during which this bypass occurred. The permittee shall also include a description of why this bypass occurred and what actions were taken to restore the equipment to its normal operation.
- (c) The permittee shall maintain monthly records which show that the control equipment can operate in such a manner as to minimize the emissions of their targeted criteria pollutant. Specifically, the permittee shall maintain records of the amount of SCR fluid used during each calendar month, as well as the amount of SCR fluid available on-site. Furthermore, the permittee shall document the status of the oxidation catalyst.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.4 For Emission Points AA-003 and AA-004, the permittee shall demonstrate compliance with the emissions standards specified in Condition 3.11 by keeping a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter.

(Ref.: 40 CFR 60.4243(b)(2)(ii) and 60.4244)

- 5.5 For Emission Points AA-003 and AA-004, the permittee shall conduct the performance testing required in Condition 5.4 according to the requirements outlined in paragraphs (a) through (f) below:
- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 to Subpart JJJJ.
 - (b) The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If a stationary SI internal combustion engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine.
 - (c) The permittee must conduct three separate test runs for each performance test required by Condition 5.4, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
 - (d) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 from 40 CFR 60.4244(d).

- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 from 40 CFR 60.4244(e).
- (f) When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 from 40 CFR 60.4244(f).

(Ref.: 40 CFR 60.4244(a-f))

5.6 For Emission Points AA-003 and AA-004, the permittee shall keep the records specified in paragraphs (a) through (c) below for both engines:

- (a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.
- (b) Maintenance conducted on each engine.
- (c) Documentation that the engines meets the emission standards outlined in Condition 3.11 through the monitoring requirements specified in Conditions 5.4 and 5.5.

(Ref.: 40 CFR 60.4245(a))

5.7 For Emission Points AA-006 and AA-007, the permittee shall keep records of the operation of the engines in emergency and non-emergency service that is recorded through the non-resettable hour meters. The permittee shall record the time and reason that the engines are being operated.

(Ref.: 40 CFR 60.4214(b))

**SECTION 6
REPORTING REQUIREMENTS**

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-003 AA-004	40 CFR Part 60, Subpart JJJJ (60.4245(c))	6.1	Notification requirements
	40 CFR Part 60, Subpart JJJJ (60.4245(d))	6.2	Reporting requirements

6.1 For Emission Points AA-003 and AA-004, the permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in paragraphs (a) through (e) below for both engines:

- (a) Name and address of the owner or operator;
- (b) The address of the affected source;
- (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (d) Emission control equipment; and
- (e) Fuel used.

(Ref.: 40 CFR 60.4245(c))

6.2 For Emission Points AA-003 and AA-004, the permittee must submit a copy of each performance test as conducted in accordance with Conditions 5.4 and 5.5 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.

(Ref.: 40 CFR 60.4245(d))