# STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL

# PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

# THIS CERTIFIES THAT

Cooperative Energy, a Mississippi electric cooperative, Benndale Peaking Station

133 Clark Mizelle Road Benndale, Mississippi George 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 the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

# MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

# AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: \_\_\_\_\_

Permit No.: 0840-00014

Effective Date: As specified herein.

Expires: [No more than 5 years from the issue date.]

Draft/Proposed 6/10/2021

#### 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. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)

3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)

4. 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 constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

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 this 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 issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)

8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the 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 emission.

(Ref.: Miss. Code Ann. 49-17-21)

9. 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)

10. 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.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)

- 11. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any 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 Part 51, Subpart I, or 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 Part 51, Subpart I, or 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 Part 51, Subpart I or 40 CFR 51.166; or
- f. Any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

# **B.** GENERAL OPERATIONAL CONDITIONS

1. 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, 11 Miss. Admin. Code Pt. 2, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.10.)

2. Any diversion from or bypass of collection and control facilities is prohibited, 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.)

3. Solids removed in the course of control of air emissions shall 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 1.a(i and ii))

- 4. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - a. Upsets

- (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
  - (i) An upset occurred and that the source can identify the cause(s) of the upset;
  - (ii) The source was at the time being properly operated;
  - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
  - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
  - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source 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.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- b. Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)
  - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations

established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

(3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

# (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

- 5. 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).)

#### C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

1. For renewal of this permit, the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board. If the applicant submits a timely and complete application pursuant to this paragraph and the Permit Board, through no fault of the applicant, fails to act on the application on or before the expiration date of the existing permit, the applicant shall continue to operate the stationary source under the terms and conditions of the expired permit, which shall remain in effect until final action on the application is taken by the Permit Board. Permit expiration terminates the

source's ability to operate unless a timely and complete renewal application has been submitted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.8.)

2. 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).)

3. 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).)

- 4. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:
  - a. Persistent violation of any 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.)

5. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

# SECTION 2 EMISSION POINT DESCRIPTION

The permittee is authorized to operate 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)/15,288 horse power (hp) 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) /15,288 horse power (hp) 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) 0.58 MMBTU/hr natural gas fired inlet gas heater – this unit is equipped with low NO <sub>X</sub> burners			
AA-006	One (1) 295 HP (220 kW) emergency diesel fired fire pump			
AA-007	One (1) 603 HP (450 kW) emergency diesel fired generator			
AA-008	One (1) 321 Gallon diesel fuel storage tank – provides fuel for the emergency generator (AA-007)			
AA-009	One (1) 250 Gallon diesel fuel storage tank – provides fuel for the emergency fire pump (AA-006)			

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard	
	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	Opacity		
		3.3	VOC		
AA-00			NOx	95.0 tpy	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).		СО		
			Total HAP	24.0 tpy	
			Individual HAP	9.0 tpy	
AA-003	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). 3.4	PM (Filterable only)	$E = 0.8808 * I^{-0.1667}$		
AA-004	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.5	Exhaust Emissions	All emissions shall be routed through control equipment	
AA-003	40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)	3.6	VOC HAP	Applicability	
AA-004 AA-006	40 CFR 63.6585(a) and (c), Subpart ZZZZ				
AA-007	40 CFR 63.6590(a)(2)(iii) and 63.6590(c)(1), Subpart ZZZZ			Demonstration of compliance with Part 63, Subpart ZZZZ by compliance with the specified requirements of Part 60, Subpart IIII or Subpart JJJJ	
AA-003 AA-004	<ul> <li>40 CFR Part 60, Subpart JJJJ</li> <li>(Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)</li> <li>40 CFR 60.4230(a)(3)(i), Subpart JJJJ</li> </ul>	3.7	NOx CO VOC	Applicability	
	40 CFR 60.4233(e), 60.4243, and Table 1 to Subpart JJJJ	3.8		Emission Standards	

# SECTION 3 EMISSION LIMITATIONS AND STANDARDS

AA-005 AA-006 AA-007	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.9	PM (Filterable only)	0.6 lb/MMBTU per hour heat input
AA-006 AA-007	40 CFR 60.4200(a)(1), Subpart IIII	3.10	NOx CO	Applicability
	40 CFR 60.4207(b), Subpart IIII 40 CFR 1090.305	3.11	Fuel Requirements	Sulfur content of 15 ppm max., AND Minimum cetane index of 40, OR Maximum aromatic content of 35 volume percent
	40 CFR 60.4209(a), Subpart IIII	3.12	Exhaust Emissions	Install a non-resettable hour meter prior to initial start-up
	40 CFR 60.4211(a)(1-3), (c), and (f)(1-3), Subpart IIII	3.13		Emergency engine definition
AA-006	40 CFR 60.4205(c), 60.4206, Item 7 Table 4, Subpart IIII	3.14	NMHC + NOx CO PM	Emission Standards
AA-007	40 CFR 60.4205(b), Subpart IIII 40 CFR 60.4202(a)(2), Subpart IIII 40 CFR 89.112(a)	3.15		
	40 CFR 60.4205(b), Subpart IIII 40 CFR 60.4202(a)(2), Subpart IIII 40 CFR 89.113(a)	3.16	Opacity	Limit exhaust opacity

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.: <u>11 Miss. Admin. Code Pt. 2, R. 1.3.A.</u>)

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.: <u>11 Miss. Admin. Code Pt. 2, R. 1.3.B.</u>)

3.3. For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of each criteria pollutant and hazardous air pollutants (HAPs) from the facility to less than the following amounts, in tons per year for each consecutive 12-month period on a rolling basis:

<u>Pollutant</u>	<b>Emissions (tpy)</b>
VOC	95.0
NOx	95.0
CO	95.0
Total HAPs	24.0
Individual HAPs	9.0

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

3.4. 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.: <u>11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).</u>)

3.5. 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 Condition 6.1 of this permit.

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

3.6. For Emission Points AA-003, AA-004, AA-006, and AA-007, the permittee is subject to and shall comply with all applicable conditions of National Emission Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

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 Emissions 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.: <u>40 CFR 63.6585(a) and (c), 63.6590(a)(2)(iii) and 63.6590(c)(1), Subpart ZZZZ</u>)

3.7. For Emission Points AA-003 and AA-004, the permittee is subject to and shall comply with all applicable conditions of Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ. Emission Points AA-003 and AA-004 are classified as new, non-emergency, Spark Ignition (SI), stationary, 4-stroke, lean burn, Reciprocating Internal Combustion Engine (RICE) located at an area source of Hazardous Air Pollutants (HAPs).

(Ref.: <u>40 CFR 60.4230(a)(3)(i)</u>, Subpart JJJJ)

3.8. For Emission Points AA-003 and AA-004, the permittee shall limit the emission rate of Nitrogen Oxides (NOx) 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), 60.4243, and Table 1 to Subpart JJJJ)

3.9. 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.: <u>11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).</u>)

3.10. For Emission Points AA-006 and AA-007, the permittee is subject to and shall comply with all applicable conditions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII. Emission Point AA-006 is classified as new, emergency diesel fire pump, with a displacement < 10 liters. Emission Point AA-007 is classified as a new, emergency, Compression Ignition (CI), Reciprocating Internal Combustion Engine (RICE) located at an area source of HAPs.

(Ref.: <u>40 CFR 60.4200(a)(1)</u>, Subpart IIII)

3.11. 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 1090.305), Subpart IIII)

3.12. 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.: <u>40 CFR 60.4209(a)</u>, Subpart IIII)

3.13. 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 3.14 and 3.15.

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 DEQ 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 nonemergency 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), Subpart IIII)

3.14. For Emission Point AA-006, the permittee shall limit the emission rate of Non-Methane Hydrocarbons plus NO<sub>X</sub> (NMHC+NO<sub>X</sub>) 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.: <u>40 CFR 60.4205(c)</u>, 60.4206, and Item 7 of Table 4, Subpart IIII)

3.15. For Emission Point AA-007, the permittee shall limit the emission rate of NMHC+NO<sub>X</sub> 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), Subpart IIII)

3.16. 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), Subpart IIII)

# 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 (Emission Point 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 DEQ 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 sources.

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

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		Facility-wide 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 60.4243(b)(2)(ii), Subpart JJJJ	5.4	Exhaust Emissions	Demonstration of continuous compliance
	40 CFR 60.4244(a-f), Subpart JJJJ	5.5		Performance testing methodology
	40 CFR 60.4245(a), Subpart JJJJ	5.6		Recordkeeping Requirement
AA-006 AA-007	40 CFR 60.4214(b), Subpart IIII	5.7	Exhaust Emissions	Recordkeeping Requirement

# SECTION 5 MONITORING AND 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 DEQ as required by Applicable Rules and Regulations or this permit upon request.

(Ref.: <u>11 Miss. Admin. Code Pt. 2, R. 2.9.</u>)

5.2. For the entire facility (Emission Point AA-000), the permittee shall keep monthly records of the amount of NO<sub>X</sub>, 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, as required by Condition 3.3 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 3.8 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 performance testing every 8,760 hours or 3 years, whichever comes first.

# (Ref.: 40 CFR 60.4243(b)(2)(ii), Subpart JJJJ)

- 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), Subpart JJJJ)

- 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 3.8 through the monitoring requirements specified in Conditions 5.4 and 5.5.

(Ref.: <u>40 CFR 60.4245(a)</u>, Subpart JJJJ)

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), Subpart IIII)

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Report permit deviations within five (5) working days.
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit certified annual monitoring report.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	All documents submitted to MDEQ shall be certified by a Responsible Official.
AA-003 AA-004	40 CFR 60.4245(d), Subpart JJJJ	6.4	Reporting Requirements
AA-006 AA-007	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Report emergency engine hours of operations

# SECTION 6 REPORTING REQUIREMENTS

6.1 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(11).)

6.2 Except as otherwise specified herein, the permittee shall submit a certified annual synthetic minor monitoring report postmarked no later than 31st of January for the preceding calendar year. This report shall address any required monitoring specified in the permit. All instances of deviations from permit requirements must be clearly identified in the report. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.

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

6.3 For the entire facility (Emission Point AA-000), any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

(Ref.: <u>11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).</u>)

6.4. 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), Subpart JJJJ)

6.5. For Emission Point AA-006 and AA-007, the permittee shall submit an annual report in accordance with Condition 6.2 that contains the hours of operation of the engines during the reporting period including if the hours were for emergency or non-emergency service.

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