STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

THIS CERTIFIES THAT

U.S. Department of Justice, Federal Bureau of Prisons – Yazoo City
2225 Haley Barbour Parkway
Yazoo City, Yazoo County, Mississippi

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

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AUTHORIZED SIGNATURE V
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: JAN 1 7 2020

Permit No.: 3020-00013

Effective Date: As specified herein.

Expires: December 31, 2024

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 Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 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. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(7).)

11. 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.

- 12. This permit does not authorize a modification as defined in Mississippi Administrative Code, Title 11, Part 2, Chapter 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:

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

The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.66;

- (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.

(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 Mississippi Administrative Code, Title 11, Part 2, Chapter 3 – Regulations for the Prevention of Air Pollution Emergency Episodes – for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in Mississippi Administrative Code, Title 11, Part 2, Chapter 1 – *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, start-ups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, 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 five (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 twenty-four (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) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Start-ups 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 start-ups 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Rule 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 (if applicable):
 - (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 MDEQ within a reasonable time any information the MDEQ 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 MDEQ 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 MDEQ 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 non-compliance does not stay any permit condition.

- 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, 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.

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	Facility-Wide (U.S. Department of Justice, Federal Bureau of Prisons – Yazoo City)			
AA-100	Miscellaneous Natural Gas-Fired Equipment [includes (but is not limited to) hot water heater boilers, dryers, space heaters, burners, laundry dryers, and air make-up units]			
AB-001	Two (2) 8.37 MMBTU / Hour Dual Fuel-Fired (Natural Gas / Fuel Oil) Boilers [each manufactured in 2010]			
AB-002	Three (3) 9.36 MMBTU / Hour Dual Fuel-Fired (Natural Gas / Fuel Oil) Boilers [each manufactured in 2010]			
AB-003	Three (3) 10.0 MMBTU / Hour Dual Fuel-Fired (Natural Gas / Fuel Oil) Boilers [each manufactured in 2011]			
AB-004	No. 1 Food Service Boiler [2.94 MMBTU / Hour Natural Gas-Fired Boiler; manufactured in 2013]			
AB-005	1.26 MMBTU / Hour Natural Gas-Fired Boiler [manufactured in 2010]			
AD-001	Four (4) 2,923 HP (2,000 kW) Diesel-Fired Emergency Generator Engines [Individual Heat Input Capacity: 20.46 MMBTU / Hour; each manufactured in 2011]			
AD-002	2,350 HP (1,750kW) Diesel-Fired Emergency Generator Engine [Heat Input Capacity: 12.25 MMBTU / Hour; manufactured in 2009]			
AD-003	823 HP (614 kW) Diesel-Fired Emergency Generator Engine [Heat Input Capacity: 5.76 MMBTU / Hour; manufactured in 2009]			
AD-004	146 HP Diesel-Fired Emergency Fire Water Pump Engine [Heat Input Capacity: 1.12 MMBTU / Hour; manufactured in 2013]			
AE-100	Small Miscellaneous Aboveground Storage Tanks [includes two (2) 150-gallon generator diesel fuel day tanks, two (2) 230-gallon generator diesel fuel day tanks, three (3) 300-gallon used oil storage tanks, one (1) 300-gallon antifreeze storage tank, one (1) 500-gallon spent cooking oil storage tank, and one (1) 100-gallon fire water pump engine day tank]			
AE-001	Two (2) 15,000-Gallon Aboveground Diesel Fuel Storage Tanks			
AE-002	3,000-Gallon Aboveground Diesel Fuel Storage Tank			

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EMISSION POINT	DESCRIPTION			
AE-003	Two (2) 15,533-Gallon Aboveground Diesel Fuel Storage Tanks			
AE-004	2,000-Gallon Aboveground Diesel Fuel – Generator Diesel Belly Tank			
AE-005	12,000-Gallon Underground Diesel Fuel Storage Tank			
AE-006	2,650-Gallon Underground Diesel Fuel Storage Tank			
AE-007	AE-007 6,000-Gallon Underground Gasoline Storage Tank			
AF-001	Woodworking Shop [emissions from these activities are routed to a baghouse]			

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Operity	40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.3	SO_2 NO_X	99.0 tpy (Rolling 12-Month Period)
		3.4	SO_2	0.25 wt.% Sulfur Content in Fuel
	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.5	PM	0.6 Pounds Per MMBTU / Hour Heat Input
	11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.6	SO_2	4.8 Pounds / MMBTU Heat Input
AB-001 AB-002 AB-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.7	Fuel Oil / Diesel Usage	Limit Use of Fuel Oil / Diesel No More Than 48 Hours Per Calendar Year (for Each Boiler)
	40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	3.8	SO_2	Applicability
AR 003	40 CFR 60.40c(a); Subpart Dc			
AB-003	40 CFR 60.40c(c – d) and 60.41c; Subpart Dc	3.9		Emission Limit / Performance Testing / Monitoring Requirement Exemption
	40 CFR 60.42c(d) and (i); Subpart Dc	3.10		0.5 wt.% Sulfur Content in Fuel
AD-001 through AD-004	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(2)(i); Subpart IIII			
	40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	3.11	HAPs	Applicability
	40 CFR 63.6590(c)(1); Subpart ZZZZ			

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Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AD-001 through AD-004	40 CFR 60.4211(f)(1 – 3); Subpart IIII	3.12	HAPs	100 Hours of Non-Emergency Operation Per Calendar Year (for Each Engine)
	40 CFR 60.4207(b); Subpart IIII 40 CFR 80.510(c); Subpart I	3.13	Fuel Requirement	15 ppm Sulfur Content (Max.) 40 Cetane Index (Min.) or 35% Aromatic Content (Max. – by volume)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.14	Hours of Operation	Operate and Maintain a Non-Resettable Hour Meter (for Each Engine)
AD-001 AD-002 AD-003	40 CFR 60.4205(b), 60.4202(a)(2), and 60.4206; Subpart IIII 40 CFR 89.112(a) and 89.113(a); Subpart B	3.15	NMHC + NO _X CO PM Opacity (Smoke)	Emission Standards
AD-001	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(b).	3.16	PM	$E = 0.8808 (I^{-0.1667})$
AD-004	40 CFR 60.4205(c); Subpart IIII	3.17	NMHC + NO _X	4.0 Grams Per Kilowatt-Hour, or 3.0 Grams Per Horsepower-Hour
			PM	0.30 Grams Per Kilowatt-Hour, or 0.22 Grams Per Horsepower-Hour
AE-007	40 CFR Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities 40 CFR 63.11111(a); Subpart CCCCCC	3.18	HAPs	Applicability
AE-007	40 CFR 63.11111(b) and (i); Subpart CCCCCC	3.19	Maximum Gasoline Throughput	10,000 Gallons Per Month

3.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall not cause or allow the emission of smoke from a point source into the open air from any process on-site that exceeds forty percent (40%) opacity.

Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

3.2 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall not discharge into the ambient (from any point source) any air contaminant of such opacity as to obscure an observer's view to a degree in excess of forty percent (40%) opacity. 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 Emission Point AA-000 (Facility-Wide), the permittee shall limit the respective total emission of nitrogen oxides (NO_X) and sulfur dioxide (SO₂) from all applicable sources to no more than 99.0 tons per year (tpy) based on a rolling 12-month period.

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

3.4 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall not combust any fuel source that contains more than 0.25 percent (by weight) sulfur content in any applicable process equipment.

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

3.5 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the maximum emission of ash and/or particulate matter (PM) from each individual process unit shall not exceed 0.6 pounds per MMBTU per hour heat input.

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

3.6 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide or SO₂) per million BTU (MMBTU) heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).)

3.7 For Emission Points AB-001, AB-002, and AB-003 (Dual Fuel-Fired Boilers), the permittee shall limit individual boiler operation while combusting fuel oil / diesel to only periodic testing, maintenance, or operator training that pertains to liquid fuel usage for a combined duration of no more than forty-eight (48) hours during any calendar year. Periods of start-up, natural gas curtailment, and/or natural gas supply emergencies do not count towards the referenced fuel usage restrictions for a boiler.

In the event that the permittee fails to adhere to the referenced fuel usage restrictions for a boiler, the permittee shall be subject to and shall immediately comply with applicable requirements found in 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for

Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

(<u>Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).</u>) (Ref.: 40 CFR 63.11237; Subpart JJJJJJ – "*Gas-fired boiler*")

3.8 Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers) is subject to and shall comply with applicable requirements found in 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units.

(Ref.: 40 CFR 60.40c(a); Subpart Dc)

3.9 For Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers), the permittee is not subject to any applicable sulfur dioxide (SO₂) emission limitation, performance testing requirement, or monitoring requirement specified by 40 CFR Part 60, Subpart Dc during periods of combustion research. Additionally, any temporary change to a boiler for the purpose of conducting combustion research is not considered a modification under 40 CFR 60.14.

For the purpose of this permit, "combustion research" is defined as the experimental firing of any fuel or combination of fuels in a boiler for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion. During these periods of research and development, the heat generated shall not be used for any purpose other than preheating combustion air for use by that boiler (i.e. the heat generated is released to the atmosphere without being used for steam generation).

(Ref.: 40 CFR 60.40c(c – d) and 40 CFR 60.41c; Subpart Dc)

3.10 For Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers), the permittee shall not combust fuel oil / diesel that contains no more than 0.5 percent (by weight) sulfur content in a boiler.

The applicable SO₂ emission standard shall apply at all times, including periods of start-up, shutdown, and malfunction.

(Ref.: 40 CFR 60.42c(d) and (i); Subpart Dc)

3.11 Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine) are subject to and shall comply with applicable requirements found in 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

By complying with the applicable requirements of Subpart IIII, the denoted engines are demonstrating compliance with 40 CFR Part 63, Subpart ZZZZ – National Emission

Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

(Ref.: 40 CFR 60.4200(2)(i); Subpart IIII and 40 CFR 63.6590(c)(1); Subpart ZZZZ)

- 3.12 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), any operation of an engine for other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If an engine is not operated in accordance with Parts (a) through (c) below, the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart IIII and shall meet all requirements for a corresponding non-emergency engine. As such, the permittee shall operate each engine according to the following provisions:
 - (a) There is no time limit on the use of an engine in emergency situations.
 - (b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
 - (c) The permittee may operate an engine 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. 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 supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1–3); Subpart IIII)

- 3.13 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall use diesel fuel that meets the following requirements (on a per-gallon basis):
 - (a) A maximum sulfur content of fifteen (15) parts per million (ppm); and
 - (b) A minimum cetane index of forty (40) or a maximum aromatic content of thirty-five (35) percent by volume.

(Ref.: 40 CFR 60.4207(b); Subpart IIII and 40 CFR 80.510(c); Subpart I)

3.14 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall operate and maintain a non-resettable hour meter on each engine.

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

- 3.15 For Emission Points AD-001, AD-002, and AD-003 (Emergency Generator Engines), the permittee shall comply with the following emission standards:
 - (a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_X): 6.4 grams per kilowatt-hour;
 - (b) Carbon Monoxide (CO): 3.5 grams per kilowatt-hour; and
 - (c) Particulate Matter (PM): 0.20 grams per kilowatt-hour.

The permittee shall operate and maintain each engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

Additionally, the permittee shall not discharge into the atmosphere any smoke exhaust that exceeds the following opacity standards:

- (d) Twenty percent (20%) during the acceleration mode;
- (e) Fifteen percent (15%) during the lugging mode; and
- (f) Fifty percent (50%) during the peaks in either the acceleration or lugging modes.

The permittee shall operate and maintain each engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), and 40 CFR 60.4206; Subpart IIII) (Ref.: 40 CFR 89.112(a) and 89.113(a); Subpart B)

3.16 For Emission Point AD-001 (2,923 HP Emergency Generator Engine), the maximum emission of ash and/or particulate matter (PM) from each engine shall not exceed an emission rate as determined by the following relationship:

$$E = 0.8808 \, (I^{-0.1667})$$

Where "E" is the emission rate in pounds per MMBTU per hour heat input and "I" is the heat input in MMBTU per hour.

- 3.17 For Emission Point AD-004 (Emergency Fire Water Pump Engine), the permittee shall comply with the following emission standards:
 - (a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_X): 4.0 grams per kilowatt-hour (or 3.0 grams per horsepower-hour); and
 - (b) Particulate Matter (PM): 0.30 grams per kilowatt-hour (or 0.22 grams per horsepower-hour).

(Ref.: 40 CFR 60.4205(c); Subpart IIII)

3.18 Emission Point AE-007 (Underground Gasoline Storage Tank) is subject to and shall comply with applicable requirements found in 40 CFR 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.

(Ref.: 40 CFR 63.11111(a); Subpart CCCCCC)

3.19 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall limit the maximum gasoline throughput of the tank to no more than 10,000 gallons per month.

(Ref.: 40 CFR 63.11111(b) and (i); Subpart CCCCCC)

SECTION 4 WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Work Practice Standard(s)
AD-001 through AD-004	40 CFR 60.4211(a); Subpart IIII	4.1	$NMHC + NO_X$	
			CO	
			PM	Conduct Compliance Practices
			Opacity (Smoke)	
AE-007	40 CFR 63.11115(a); Subpart CCCCCC	4.2	HAPs	Conduct Best Management Practices
	40 CFR 63.11116(a); Subpart CCCCCC	4.3		Minimize Vapor Releases

- 4.1 For Emission Points AD-001 through AD-004 (Emergency Generator Engines), the permittee shall conduct the following practices to demonstrate compliance with the applicable emission standards specified in Conditions 3.14 and 3.16:
 - (a) Operate and maintain each engine and control device (if any) in accordance with the manufacturer's emission-related written instructions;
 - (b) Change only those emission-related settings that are permitted by the manufacturer; and
 - (c) Meet the requirements of 40 CFR Parts 89, 94, and/or 1068 (as applicable).

(Ref.: 40 CFR 60.4211(a); Subpart IIII)

4.2 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall operate and maintain a storage tank (including any associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. The determination of whether such operation and maintenance procedures are being used will be based on information that shall available to the MDEQ upon request, 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 storage tank.

(Ref.: 40 CFR 63.11115(a); Subpart CCCCCC)

4.3 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the

atmosphere for extended periods of time. The practices to be taken shall include (but are not limited to) the following:

- (a) Minimize gasoline spills;
- (b) Clean up spills as expeditiously (as practicable);
- (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
- (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices (*e.g.* oil/water separators).

(Ref.: 40 CFR 63.11116(a); Subpart CCCCCC)

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.2	SO ₂ NO _X	Calculate and Record Emissions (Monthly and Rolling 12-Month Period)
		5.3	SO_2	Maintain Documentation on Sulfur Content of Each Fuel Source
AB-100	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.4	NO_X	Maintain Updated Listing of Miscellaneous Equipment
AB-001 AB-002 AB-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.5	Fuel Oil / Diesel Usage	Monitor and Record Date, Time, and Duration of Fuel Oil / Diesel Combustion Periods
AB-003	40 CFR 60.42c(h)(1), (4) and 60.44c(h); Subpart Dc 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.6	SO_2	Maintain Documentation on Sulfur Content of Each Fuel Source
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.7		Monitor and Record Periods of Combustion Research
	40 CFR 60.4214(b); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.8	HAPs	Record Hours of Operation (Emergency and Non-Emergency)
AD-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.9	Sulfur Content Aromatic Content	Maintain Documentation Indicating Diesel Fuel Meets Emissions Standards
through AD-004	40 CFR 60.4211(c); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.10	NMHC + NO _X CO	Maintain Documentation Indicating Engine Certification
	40 CFR 60.4211(g)(2) and (3); Subpart IIII	5.11	PM Opacity (Smoke)	Demonstrate Compliance if Engine is Not Installed, Operated, or Maintained in Accordance with Manufacturer's Specifications
AE-007	40 CFR 63.11111(e) and 63.11125(d); Subpart CCCCC	5.12	HAPs	Record and Maintain Monthly Gasoline Throughput and Each Malfunction Occurrence

5.1 For Emission Point AA-000 (Facility-Wide), 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. Supporting 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 the MDEQ as required by "Applicable Rules and Regulations" or this permit upon request.

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

5.2 For Emission Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of sulfur dioxide (SO₂) and nitrogen oxides (NO_X) from all applicable sources in tons both monthly and on a rolling 12-month period.

Unless otherwise specified herein, the permittee shall include all reference data utilized to validate calculated emissions (*e.g.* engineering judgement determinations, operational data, applicable emission factors, etc.).

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

5.3 For Emission Point AA-000 (Facility-Wide), the permittee shall maintain documentation for any fuel source to be combusted by on-site process equipment (i.e. natural gas and fuel oil / diesel) that demonstrates compliance with the sulfur content limitation specified in Condition 3.4.

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

5.4 For Emission Point AB-100 (Miscellaneous Natural Gas-Fired Equipment), the permittee shall maintain an up-to-date inventory of all process equipment encompassed under this emission group. Additionally, the permittee shall calculate and maintain an up-to-date cumulative heat input capacity (in MMBTU per hour) for each sub-group (*e.g.* hot water heater boilers, space heaters, air make-up units, etc.)

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

5.5 For Emission Points AB-001, AB-002, and AB-003 (Dual Fuel-Fired Boilers), the permittee shall monitor and record the date, time, and duration (in hours) of every occurrence in which a boiler combusts fuel oil / diesel. Additionally, the permittee shall include a written explanation with each noted occurrence that details the purpose for combusting fuel oil / diesel.

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

5.6 For Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers), the permittee shall maintain documentation for any fuel oil / diesel combusted in the boiler

that both demonstrates compliance with the sulfur content limitation specified in Condition 3.10 and contains the information required by Condition 6.7.

Additionally, the permittee shall maintain documentation for any gaseous fuel combusted in a boiler that displays the sulfur content, the potential sulfur dioxide (SO₂) emission rate, and the information required by Condition 6.7. Only an initial certification record must be obtained from the applicable gaseous fuel supplier upon issuance of this permit.

The maintained documentation required by this condition may serve as an approved substitute for the applicable performance testing requirements specified in 40 CFR Part 60, Subpart Dc.

(Ref.: 40 CFR 60.42c(h)(1), (4) and 60.44c(h); Subpart Dc) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

5.7 For Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers), the permittee shall monitor and record the date, time, and duration (in hours) of any period in which a boiler is operated solely for combustion research. Additionally, the permittee shall include a written explanation with each noted period that details the purpose of the research.

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

5.8 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation monthly for each emergency engine for both emergency and non-emergency service. The permittee shall also detail what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 60.4214(b); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

5.9 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall maintain documentation that demonstrates the diesel fuel utilized by each emergency engine complies with the fuel standards referenced in Condition 3.13.

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

5.10 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall maintain documentation that identifies each emergency engine as certified for the applicable emission standards referenced in Conditions 3.14 and 3.16. Additionally, the permittee shall maintain records that demonstrates each emergency engine was installed and configured to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 5.11 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), if the permittee does not operate and maintain each engine according to the manufacturer's emission-related written instructions (or the permittee changes emission-related settings in a way that is not permitted by the manufacturer), the permittee shall demonstrate compliance with the applicable emission standards specified in Condition 3.14 and 3.16 through the following actions:
 - (a) Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions;
 - (b) For Emission Point AD-004 (146 HP Emergency Fire Water Pump Engine), the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one (1) year of start-up, or within 1 year after an engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer;
 - (c) For Emission Points AD-001 through AD-003 (Emergency Generator Engines), the permittee shall adhere to the requirements specified in Part (b) of this condition and conduct a subsequent performance test every 8,760 hours of operation or three (3) years (whichever comes first) thereafter to demonstrate compliance with the applicable emission standards.

(Ref.: 40 CFR 60.4211(g)(2) and (3); Subpart IIII)

- 5.12 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall record and maintain the following information:
 - (a) The monthly gasoline throughput from the storage tank;
 - (b) The occurrence and duration of each malfunction of all applicable equipment, which includes (but is not limited to) process equipment, air pollution control equipment, and monitoring equipment; and
 - (c) The action(s) taken during each period of malfunction to minimize emissions in accordance with Condition 4.3, which shall include any corrective action(s) taken to restore malfunctioning applicable equipment (including but not limited to) process equipment, air pollution control equipment, and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.11111(e) and 40 CFR 63.11125(d); Subpart CCCCCC)

SECTION 6 REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Reporting Requirement(s)
1 A A (WW)	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.1	Submit Notification(s) / Report(s) Certified by a Responsible Official or Duly Authorized Representative
		6.2	Report Permit Deviations Within Five (5) Working Days
		6.3	Submit Annual Monitoring Report
		6.4	Submit Annual Report on SO ₂ and NO _X Emissions
AB-001 AB-002 AB-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.5	Submit Annual Report on Diesel Fuel Usage Data
		6.6	Submit Notification of Subpart JJJJJJ Applicability
AB-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.7	Submit Annual Summary on Fuel Supplier Documentation
AD-001 through AD-004	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.8	Submit Annual Summary on Hours of Operation (Non- Emergency and Emergency)
AE-007	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.9	Submit Annual Report on Gasoline Throughput
		6.10	Submit Annual Report on Equipment Malfunction

Any notification / report required by this permit to be submitted to the MDEQ shall contain a certification signed by an authorized Responsible Official (RO) or Duly Authorized Representative (DAR) that states, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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

6.2 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 action(s) / preventive measures taken. The report shall be made within five (5) working days of the time the deviation began.

6.3 Except as otherwise specified herein, the permittee shall submit an annual monitoring report postmarked no later than January 31st of each calendar year for the preceding calendar year. The report shall contain any required monitoring data as specified in Section 6 of this permit. Additionally, all instances of deviations from permit requirements shall be clearly identified in the report.

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

6.4 For Emission Point AA-000 (Facility-Wide), the permittee shall submit an annual report in accordance with Condition 6.3 that details the total emission of sulfur dioxide (SO₂) and nitrogen oxides (NO_X) from all applicable sources in tons both monthly and on a rolling 12-month period. Additionally, the report shall include all reference data utilized to validate the presented SO₂ and NO_X emissions (*e.g.* applicable emission factors, engineering judgement determinations, etc.).

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

- 6.5 For Emission Points AB-001, AB-002, and AB-003 (Dual Fuel-Fired Boilers), the permittee shall submit an annual report in accordance with Condition 6.3 that details the following information:
 - (a) The total duration (in hours) of all periods in which each boiler was operated using fuel oil / diesel monthly; and
 - (b) The volume (i.e. gallons or standard cubic feet) of each fuel combusted within a boiler monthly.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). and 40 CFR 60.48c(g)(2); Subpart Dc)

6.6 For Emission Points AB-001, AB-002, and AB-003 (Dual Fuel-Fired Boilers), upon exceeding the fuel usage restriction specified in Condition 3.7, the permittee shall submit a written notification to the MDEQ that indicates the date in which a boiler becomes subject to 40 CFR Part 63, Subpart JJJJJJ no later than thirty (30) days after determining applicability. Additionally, the report shall outline any emission limitations, monitoring requirements, and/or reporting requirements within the subpart applicable to an affected boiler.

- 6.7 For Emission Point AB-003 (10.0 MMBTU / Hour Dual Fuel-Fired Boilers), the permittee shall submit an annual report in accordance with Condition 6.3 that details the applicable fuel supplier documentation required by Condition 5.6 and the following information:
 - (a) For Distillate Oil:

- (1) The name of the oil supplier.
- (2) A statement from the corresponding supplier that the utilized fuel oil / diesel fuel complies with the specifications under the definition of distillate oil. For the purpose of this permit, "distillate oil" is defined as follows:
 - (i) Fuel oil that complies with fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in Method D396;
 - (ii) Diesel fuel oil numbers 1 or 2, as defined by the ASTM in Method D975;
 - (iii) Kerosene, as defined by the ASTM in Method D3699;
 - (iv) Biodiesel, as defined by the ASTM in Method D6751; and
 - (v) Biodiesel blends, as defined by the ASTM in Method D7467.
- (3) The sulfur content or maximum sulfur content of the oil.
- (b) For Other Fuels (i.e. natural gas):
 - (1) The name of the supplier of the fuel;
 - (2) The potential sulfur emissions rate or maximum potential sulfur emission rate of the utilized fuel in pounds per MMBTU heat input; and
 - (3) The method used to determine the potential sulfur emissions rate of the fuel.

In accordance with Condition 5.6, the permittee may derive the information required in Part (b) of this condition from the same initial certification record annually.

(Ref.: 40 CFR 60.48c(f)(1 – 4), Subpart Dc; 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

6.8 For Emission Points AD-001 through AD-004 (Emergency Generator Engines and Emergency Fire Water Pump Engine), the permittee shall submit an annual report in accordance with Condition 6.3 that details the hours of operation for each engine. The report shall also document how many hours are spent for emergency operation, what classified the operation as an emergency situation, how many hours are spent for non-emergency operation, and the circumstance(s) for the non-emergency operation.

6.9 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall submit an annual report in accordance with Condition 6.3 that details the monthly gasoline throughput from the storage tank.

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

6.10 For Emission Point AE-007 (Underground Gasoline Storage Tank), the permittee shall submit an annual report in accordance with Condition 6.3 that details the occurrence of any malfunction of applicable equipment for the storage tank, which shall include (but not be limited to) process equipment, air pollution control equipment, and monitoring equipment. Additionally, the report shall outline any corrective action(s) taken to restore the malfunctioning equipment to its normal or usual manner of operation.

If no malfunctions occur during a calendar year period, the permittee shall report a submit a negative declaration that details such in the corresponding annual monitoring report.