

**STATE OF MISSISSIPPI
AND FEDERALLY ENFORCEABLE
AIR POLLUTION CONTROL
PERMIT**

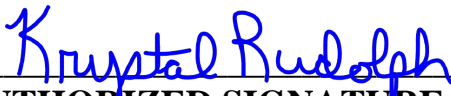
**TO OPERATE AIR EMISSIONS EQUIPMENT AT A
SYNTHETIC MINOR SOURCE**

THIS CERTIFIES THAT

Caterpillar, Inc. – Caterpillar Remanufactured Components Group
100 Caterpillar Drive
Booneville, Prentiss 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



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: June 13, 2019

Permit No.: 2340-00048

Effective Date: As Specified Herein

Modified: February 11, 2020; July 1, 2021

Expires: May 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.

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

- 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 [a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) Routine maintenance, repair, and replacement;
- (b) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) Use of an alternative fuel or raw material by a stationary source which:

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.

(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, 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	Facility-Wide (Caterpillar, Inc. – Caterpillar Remanufactured Components Group)
AA-100a	Spray Booth utilized for Wire Arc Spray Application and Flame Spray Applications [dust generated from this booth is routed directly to a dust collector for particulate matter control]
AA-100b	Spray Booth utilized for Wire Arc Spray Applications, Flame Spray Applications, and Cold Spray Operations [dust generated from this booth is routed directly to a dust collector for particulate matter control]
AA-100c	Six (6) Detail Booths [each booth contains one (1) downdraft table that is utilized for buffing and grinding parts; each downdraft table is partially enclosed (open at the top) in order to accommodate hoists, operates under vacuum, and is vented to a respective dust collector for particulate matter control]
AA-100e	Rod Rust Preventative Spray Station
AA-100f	Various Dunker Tanks and Washers
AA-100g	330-Gallon Immersion Tank [contains corrosion prevention liquids]
AB-100a	Shot Peen Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100b	Ceramic Bead Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100c	Ceramic Bead Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100d	Ceramic Bead Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100e	Ceramic Bead Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100f	Ceramic Bead Blasting Operations [emissions are routed to baghouses located inside the building]
AB-100g	Facility-Wide Welding Operations

EMISSION POINT	DESCRIPTION
AB-100h	Cap Grinding Operations [consists of a small cap grinder station; emissions are routed to a baghouse inside the building]
AB-100i	Polishing Station [emissions are routed a wet dust collector]
AB-100j	Polishing Stations [emissions are vented inside the building]
AB-100k	Polishing Stations [emissions are vented inside the building]
AB-100l	Polishing Stations [emissions are vented inside the building]
AB-100m	Machining Operations [emissions are routed to a dust collector for particulate matter control]
AB-100n	Slurry Blast Operations
AB-100o	Internal Grinding Operations [includes use of a grinding coolant and an enclosed dust free process]
AC-101	Final Rod Flushing Operations [includes one (1) 490-gallon tank and one (1) 420-gallon tank]
AC-102	3-Stage Rough Rod Flushing Operations [includes one (1) 625-gallon tank and two (2) 325-gallon tanks]
AC-103	Four (4) 500-Gallon Dunker Tanks [parts are flushed and a rust preventative coating is applied]
AC-104	2-Stage Final Water / Oil Pump Wash Operations [includes one (1) 560-gallon tank and one (1) 1,400-gallon tank]
AC-105	Engine Connecting Rod Flushing Operations [includes one (1) 305-gallon tank and four (4) 220-gallon tanks]
AC-106	Fuel System Rough Washing Operations [includes five (5) 330-gallon tanks]
AC-107	5-Stage Oil Cooler Cleaning and Painting Operations [includes two (2) 200-gallon tanks and two (2) 350-gallon tanks]
AC-108	Cam Shaft Tarp Washing Operations [includes one (1) 350-gallon tank]
AC-109	Typhoon Fuel System Washing Operations [includes one (1) 130-gallon tank]

EMISSION POINT	DESCRIPTION
AC-110	Rod Belt Washing Operations [includes one (1) 200-gallon tank]
AC-111	3-Stage Rocker Arm Washing Operations [includes one (1) 190-gallon tank, one (1) 175-gallon tank, and three (3) 300-gallon tanks]
AC-112	Aluminum Parts Washing Operations [includes one (1) 1,252-gallon tank]
AC-113	Heat Pin Washing Operations [includes one (1) 300-gallon tank]
AC-114	3-Stage Piston Rough Washing Operations [includes one (1) 275-gallon tank, one (1) 400-gallon tank, and two (2) 275-gallon tanks]
AC-115	Diesel Engine Flywheel Flushing Operations
AC-116	2-Stage Rough Crown Washing Operations [includes one (1) 190-gallon tank and (1) 175-gallon tank]
AC-117	Final Crown Washing Operations [includes one (1) 175-gallon tank]
AC-118	Miscellaneous Part Washing Operations
AD-101	0.8 MMBTU / Hour Stage 1 Rough Rod Wash Natural Gas-Fired Burner
AD-102	Two (2) 0.2 MMBTU / Hour Stage 2 & 3 Rough Rod Wash Natural Gas-Fired Burners
AD-103	Two (2) 1.5 MMBTU / Hour Stage 1 & 2 Final Water / Oil Pump Wash Natural Gas-Fired Burners
AD-104	3.0 MMBTU / Hour Natural Gas-Fired Burner
AD-105	Two (2) 1.0 MMBTU / Hour Natural Gas-Fired Burners [one located in Rough Water / Oil Pump Wash Operations and one located in the Spray Booth for Wire Arc Spray Application]
AD-106	Natural Gas-Fired Rooftop Air Make-Up and Conditioning Units [Total Heat Input Capacity: 7.31 MMBTU / Hour]
AD-107	361 HP (2.53 MMBTU / Hour) Diesel-Fired Emergency Generator Engine [manufactured before 2006]
AD-108	Two (2) 0.25 MMBTU / Hour Natural Gas-Fired Graphite / Print Operation Ovens
AD-109	One (1) 0.7 MMBTU / Hour Natural Gas-Fired Waste Water Treatment System Burner

EMISSION POINT	DESCRIPTION
AD-110	One (1) 1.3 MMBTU / Hour Natural Gas-Fired Dryer
AD-111	One (1) 1.1 MMBTU / Hour Natural Gas-Fired Chemical Lab Space Heater
AE-100	Facility-Wide Miscellaneous Operations [includes (but not limited to) fuel system assembly and testing, battery charge, induction heat cam shaft gears, disassembly, assembly and packaging, oil and chemical use (i.e. miscellaneous, maintenance, and machining), and component flush station]
AF-100	Laser Cleaning Operations [includes (but not limited to) the general cleaning of surfaces / molds, by producing a high-quality laser beam (max. output: 160 kW per pulses) to remove oxides, paint, and varnish]

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity (smoke)	≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1).	3.3	PM	$E = 4.1(p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.4	SO ₂	4.8 lbs. / MMBTU
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). (Title V Avoidance Limits)	3.5	VOCs	89.0 tpy (Rolling 12-Month Total)
		3.6	HAPs	9.60 tpy (Individual) 22.60 tpy (Total) (Rolling 12-Month Totals)
3.7	PM ₁₀ / PM _{2.5}	89.0 tpy (Rolling 12-Month Totals)		
AD-101 through AD-111	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.8	PM	0.6 lbs. / MMBTU heat input
AD-107	40 CFR Part 63, Subpart ZZZZ National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6585(a), (c), and 63.6590(a)(1)(iii); Subpart ZZZZ	3.9	HAPs	General Applicability
AA-100a AA-100b AA-100c AB-100a through AB-100f AB-100h AB-100i	11 Miss. Admin Code Pt. 2, R. 2.2.B.(10).	3.10	PM / PM ₁₀ / PM _{2.5} (filterable only)	Operate Emissions Control Devices at All Times During Operation

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limitation / Standard
AD-107	40 CFR 63.6640(f); Subpart ZZZZ	3.11	Operating Limit	50 Hours Per Calendar Year – Non Emergency Operations 100 Hours Per Calendar Year – Maintenance and Testing
	40 CFR 63.6625(f); Subpart ZZZZ	3.12	Monitoring Limit	Install Non-Resetable Hour Meter

3.1 For Emission Point AA-000 (Facility-Wide), 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 that exceeds forty (40) percent opacity subject to the exceptions provided below:

- (a) Start-up operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60% opacity and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

3.2 For Emission Point AA-000 (Facility-Wide), 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 Emission Point AA-000 (Facility-Wide), the permittee shall not allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the relationship:

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

where “E” is the emission rate in pounds per hour and “p” is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

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

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

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

- 3.4 For Emission Point AA-000 (Facility-Wide), the permittee shall limit volatile organic compound (VOC) emissions to no more than 89.0 tons per year (tpy) for any consecutive 12-month period on a rolling basis.

(Ref.:11 Miss. Admin. Code Pt. 2, R. 2.2. B.(10). – Title V Avoidance Limit)

- 3.5 For Emission Point AA-000, the permittee shall limit hazardous air pollutant (HAP) emissions to no more than 9.60 tpy for any individual HAP and no more than 22.60 tpy for all HAPs in total for any consecutive 12-month period on a rolling basis.

(Ref.:11 Miss. Admin. Code Pt. 2, R. 2.2. B.(10). – Title V Avoidance Limits)

- 3.6 For Emission Point AA-000, the permittee shall limit the respective emission of particulate matter less than 10 microns (μm) in diameter (PM_{10}) and PM less than 2.5 μm in diameter ($\text{PM}_{2.5}$) to no more than 89.0 tpy for any consecutive 12-month period on a rolling basis.

(Ref.:11 Miss. Admin. Code Pt. 2, R. 2.2. B.(10). – Title V Avoidance Limits)

- 3.7 For Emission Points AD-101 through AD-111, the maximum permissible emission of ash and/or particulate matter (PM) from fossil fuel burning installations of less than ten (10) MMBTU per hour heat input 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).)

- 3.8 For Emission Point AD-107, the permittee is subject to and shall comply with 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE).

Emission point AD-107 is a < 500 HP stationary, diesel fired four stroke, rich burn (4SRB) Compression Ignition emergency RICE located at an area source of HAP emissions and was constructed prior to June 12, 2006.

(40 CFR 63.6585(a), (c), and 63.6590(a)(1)(iii); Subpart ZZZZ)

- 3.10 For Emission Points AA-100a, AA-100b, AA-100c, AB-100a through AB-100f, AB-100h, and AB-100i, in order to minimize the emissions of PM, PM_{10} , and $\text{PM}_{2.5}$, the permittee

shall operate all accompanying emissions control devices at all times in which these processes are in operation.

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

3.12 The CI engine under Emission Point AD-107 is considered an emergency engine under the applicable NESHAP (Subpart ZZZZ). In order for these engines to be considered emergency engines under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year as described in (c) below, is prohibited. If the permittee does not operate the engines according to the requirements in (a) through (c) below, the engines will not be considered emergency engines under these Subparts and must meet the applicable requirements for non-emergency engines.

- (a) There is no limit on the use of any engine during emergency situations.
- (b) The permittee may operate the engines for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engines. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of an emergency engine in excess of 100 hours per year.
- (c) The permittee may operate an emergency 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 allowed in paragraph (b). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response unless the permittee meets the criteria in 63.6640(f)(4)(i) or (ii); Subpart ZZZZ as applicable.

(Ref.: 63.6640(f)(1), (2), and (4); Subpart ZZZZ)

3.13 For emergency stationary CI RICE Emission Point AD-107, the permittee shall install a non-resettable hour meter if one is not already installed.

(Ref.: 40 CFR 63.6625(f); Subpart ZZZZ)

SECTION 4
WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Work Practice Standard
AD-107	40 CFR 63.6603 – Table 2d, Item 4; Subpart ZZZZ	4.1	HAPs	Conduct Routine Maintenance

4.1 For Emission Point AD-107, except during periods of start-up, the permittee shall conduct and record the following routine maintenance actions on the engine:

- (a) Change the oil and filter in the engine every five hundred (500) hours of operation or annually (whichever comes first);
- (b) Inspect the air cleaner every one thousand (1,000) hours of operation or annually (whichever comes first) and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first) and replace as necessary.

(Ref.: 40 CFR 63.6603(a) – Table 2d, Item 4; Subpart ZZZZ)

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	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 Five (5) Years
AA-100a AA-100b AA-100c	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.2	PM / PM ₁₀ / PM _{2.5} (filterable only)	Monitoring for PM / PM ₁₀ / PM _{2.5}
AA-100a AA-100b	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.3	VOCs HAPs	Maintain Records For Any and All Coatings, Adhesives, Solvents, etc. that are VOC/HAP-Containing Materials Keep Records of the VOC/HAP Content of All Materials Used Calculate Monthly and 12-Month Rolling VOC and HAP Emissions
AD-107	40 CFR 63.6625(e), (h) and (i); Subpart ZZZZ	5.4	HAPs	Non-Resetable Meter
	40 CFR 63.6605 and 63.6640(a), (b), (e), (f); Subpart ZZZZ	5.5		Monitoring Continuous Compliance Requirements
	40 CFR 63.10(b)(2)(xiv); 63.10(b)(2)(viii); Subpart A 40 CFR 63.6605(b), 63.6640; and 63.6655(a), (d), (e), (f); Subpart ZZZZ	5.6		Maintain Records For Stationary RICE Generators
	40 CFR 63.10(b)(1); Subpart A 40 CFR 63.6660; Subpart ZZZZ	5.7		Maintain Records For a Minimum of Five (5) Years

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. 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 the MDEQ as required by Applicable Rules and Regulations of this permit upon request.

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

5.2 For Emission Points AA-100a, AA-100b, and AA-100c, the permittee shall perform weekly visible emissions observations for at least six (6) minutes for each emission point

and record the results of these observations. These weekly observations shall be completed in accordance with EPA Method 22 or an equivalent test method approved by the MDEQ prior to the required observation.

In the event that visible emissions are observed, the permittee shall immediately determine if the control device is operating properly and perform any necessary repairs or maintenance required in order to restore the control device to normal operation. Upon discovery that the control device is not operating properly, the emission point will be shut down immediately until all repairs are completed and the emission point is returned to normal operation. Upon completion of the corrective action, a second visible emissions observation shall be conducted. Furthermore, the permittee shall maintain a log detailing the following items:

- (a) The emission point, date, and time of the visible emissions observations and name of the person conducting the observation;
- (b) The duration of any visible emissions noted; and
- (c) If visible emissions were noted, the actions taken in order to return the equipment to proper operating conditions.

A copy of this log shall be kept on-site and shall be made readily available upon request.

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

5.3 For Emission Points AA-100a and AA-100b, the permittee shall keep records of the total gallons of each VOC- / HAP-containing material used on a monthly basis. Furthermore, the permittee shall keep records of the following information for each VOC- / HAP-containing material used:

- (a) The identification of each VOC- / HAP-containing material used;
- (b) The VOC / HAP content of each material, including a description of the method used to determine the VOC / HAP contents; and
- (c) The density of each VOC / HAP material used.

These records shall be used to calculate the monthly VOC / HAP emissions in tons per year and the 12-month rolling total VOC / HAP emissions in tons per year.

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

5.4 For Emission Point AD-107, the permittee shall comply with the following monitoring requirements:

- (a) Operate and maintain, according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent

practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions;

- (b) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and
- (c) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement.
 - (1) The oil analysis shall be performed at the same frequency specified for changing the oil.
 - (2) The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:
 - (i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
 - (ii) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - (iii) Percent water content (by volume) is greater than 0.5.

If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(Ref: 40 CFR 63.6625(e), (h) and (i); Subpart ZZZZ)

5.5 For Emission Point AD-107, the permittee shall comply with the following continuous compliance requirements:

- (a) Work or management practices by operating and maintaining according to the manufacturer's emission-related operation and maintenance instructions or by developing and following a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions;

- (b) Report each instance in which an emission or operating limitation (that applies) was not met according to 40 CFR 63.6650, Subpart ZZZZ;
- (c) Report each instance in which a general provisions requirement (that applies) was not met;
- (d) Operate in accordance with the following:
 - (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (2) 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 associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee may petition for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(Ref: 40 CFR 63.6605; 40 CFR 63.6640(a), (b), (e) and (f); Subpart ZZZZ)

5.6 For Emission Point AD-107, the permittee shall comply with the following recordkeeping requirements:

- (a) A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 63.10(b)(2)(xiv), Subpart A;
- (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
- (c) Records of performance tests and performance evaluations as required in 63.10(b)(2)(viii);
- (d) Records of all required maintenance performed on the air pollution control and monitoring equipment; and
- (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), Subpart ZZZZ, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;

- (f) Keep the records required in Table 6 of this subpart (as stated in 40 CFR 63.6605 and 63.6640; Subpart ZZZZ) to show continuous compliance with each emission or operating limitation that applies;
- (g) Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the maintenance plan; and
- (h) Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for non-emergency and emergency operation (including what classified the operation as emergency).

(Ref: 40 CFR 63.6655(a), (d), (e) and (f); Subpart ZZZZ)

5.7 For Emission Point AD-107, the permittee shall comply with the following recordkeeping requirements:

- (a) Records shall be in a form suitable and readily available for expeditious review;
- (b) The permittee shall keep each record for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
- (c) Keep each record readily accessible in hard copy or electronic form for at least five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(Ref: 40 CFR 63.6660; Subpart ZZZZ)

**SECTION 6
REPORTING REQUIREMENTS**

Emission Point	Applicable Requirement	Condition Number	Reporting Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.1	Report Permit Deviations Within Five (5) Working Days
		6.2	Submit a Certified Annual Monitoring Report
		6.3	All Documents Submitted to MDEQ Shall be Certified by a Responsible Official
		6.4	Submit Annual Report For Each Coating, Adhesive, Solvent, or other VOC- or HAP-Containing Material
		6.5	Submit an Annual Report for PM / PM ₁₀ /PM _{2.5}
AD-107	40 CFR Part 63, Subpart ZZZZ – Table 2d, Footnote 2	6.6	Report Management Practice Delay
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.7	Report Operational Data

6.1 For Emission Point AA-000 (Facility-Wide), 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. The 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 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall submit a certified annual synthetic minor monitoring report postmarked no later than January 31 of each year 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 Emission Point AA-000 (Facility-Wide), the permittee shall submit any and all documents required by this permit with 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.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 6.4 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a monitoring report in accordance with Condition 6.2 that details the following information:
- (a) Identification of each coating, adhesive, solvent, or other VOC- or HAP-containing material used;
 - (b) The VOC and HAP content(s) of each coating, adhesive, solvent, or other VOC- or HAP-containing material used;
 - (c) The total gallons of each coating, adhesive, solvent or other VOC- or HAP-containing material used in any consecutive 12-month period; and
 - (d) The total VOC emission rate, the emission rate of each individual HAP and the total HAP emission rate in tons per year based on a rolling 12-month total.

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

- 6.5 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a monitoring report in accordance with Condition 6.2 that detail the following information:
- (a) The quantity of PM / PM₁₀ / PM_{2.5} producing materials, which may include (but is not limited to) abrasive blasting medium, welding wire, electrodes, etc. consumed/used; and
 - (b) The total particulate emission rate in tons per year based on a rolling 12-month total basis.

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

- 6.6 For Emission Point AD-107, the permittee shall comply with the reporting requirement: if an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required by Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law.

The management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has abated. The permittee shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable

(Ref: 40 CFR Part 63, Subpart ZZZZ – Table 2d, Footnote 2)

6.7 For Emission Point AD-107, the permittee shall submit a monitoring report in accordance with Condition 6.2 that details the following information on the engine:

- (a) A summary of operations; and
- (b) Any corrective action(s) taken in response to malfunctions or deviations.

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