

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: DATE

Permit No.: 2340-00048

Effective Date: As Specified Herein

Expires: DATE

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]
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]
AA-100c	Four (4) 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 vents to a dust collector]
AA-100d	One (1) Downdraft Table [operations consist of detailing activities of rocker arm components; operates under vacuum; emissions are routed to dust filters that vent inside the building]
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 that vent inside the building]
AB-100b	Ceramic Bead Blasting Operations [emissions are routed to baghouses that vent inside the building]
AB-100c	Ceramic Bead Blasting Operations [emissions are routed to baghouses that vent inside the building]
AB-100d	Ceramic Bead Blasting Operations [emissions are routed to baghouses that vent inside the building]
AB-100e	Ceramic Bead Blasting Operations [emissions are routed to baghouses that vent inside the building]
AB-100f	Ceramic Bead Blasting Operations [emissions are routed to baghouses that vent inside the building]

EMISSION POINT	DESCRIPTION
AB-100g	Facility-Wide Welding Operations
AB-100h	Cap Grinding Operations [consist of a small cap grinder station; emissions are routed to a baghouse that vents inside the building]
AB-100i	Polishing Station [emissions are routed to a wet dust collector that vents inside the building]
AB-100j	Polishing Stations [emissions are routed to a wet dust collector that vents inside the building]
AB-100k	Polishing Stations [emissions are routed to a baghouse that vents inside the building]
AB-100l	Polishing Stations [emissions are routed to a baghouse that vents inside the building]
AB-100m	Machining Operations [emissions are routed to a dust collector that vents inside the building]
AB-100n	Slurry Blast Operations
AB-100o	Internal Grinding Operations [a grinding coolant is used in an enclosed dust-free process]
AB-100p	Machining Centers [each center uses a coolant during machining activities]
AB-100q	One (1) Sunnen Mill [emissions vent inside the building]
AC-101	Final Rod Flushing Operations [include one (1) 490-gallon tank and one (1) 420-gallon tank]
AC-102	3-Stage Rough Rod Flushing Operations [include 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 [include one (1) 560-gallon tank and one (1) 1,400-gallon tank]
AC-105	Engine Connecting Rod Flushing Operations [include one (1) 305-gallon tank and four (4) 220-gallon tanks]
AC-106	Fuel System Rough Washing Operations [include five (5) 330-gallon tanks]
AC-107	5-Stage Oil Cooler Cleaning and Painting Operations [include two (2) 200-gallon tanks and two (2) 350-gallon tanks]
AC-108	Cam Shaft Tarp Washing Operations [include one (1) 350-gallon tank]

EMISSION POINT	DESCRIPTION
AC-109	Typhoon Fuel System Washing Operations [include one (1) 130-gallon tank]
AC-110	Rod Belt Washing Operations [include one (1) 200-gallon tank]
AC-111	3-Stage Rocker Arm Washing Operations [include one (1) 190-gallon tank, one (1) 175-gallon tank, and three (3) 300-gallon tanks]
AC-112	Aluminum Parts Washing Operations [include one (1) 1,252-gallon tank]
AC-113	Heat Pin Washing Operations [include one (1) 300-gallon tank]
AC-114	3-Stage Piston Rough Washing Operations [include 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 [include one (1) 190-gallon tank and (1) 175-gallon tank]
AC-117	Final Crown Washing Operations [include one (1) 175-gallon tank]
AC-118	Miscellaneous Part Washing Operations
AD-100	Facility-Wide Natural Gas-Fired Sources for various activities [each source less than 10 MMBTU / Hour]
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

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 [include (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 [include (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 (Facility-Wide)	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	
	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)
AA-100a AA-100b AA-100c AA-100d AB-100a through AB-100f AB-100h through AB-100m	11 Miss. Admin Code Pt. 2, R. 2.2.B.(10).	3.8	PM / PM ₁₀ / PM _{2.5} (filterable only)	Operate Emissions Control Devices at All Times During Operation
AD-101 through AD-108 AD-110 AD-111	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.9	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	3.10	HAPs	General Applicability

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limitation/Standard
AD-107	40 CFR 63.6640(f)(1), (2), and (4); 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-Resettable 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.

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.

(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 Point 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.

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

- 3.5 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) based on a rolling 12-month total.

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

- 3.6 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 based on a rolling 12-month total.

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

- 3.7 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 based on a rolling 12-month total.

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

- 3.8 For Emission Points AA-100a, AA-100b, AA-100c, AA-100d, AB-100a through AB-100f, and AB-100h through AB-100m, in order to minimize the emissions of PM, PM_{10} , and $\text{PM}_{2.5}$, the permittee shall operate all associated 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).)

- 3.9 For Emission Points AD-101 through AD-108, AD-110, and 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).)

- 3.10 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 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)

3.11 For Emission Point AD-107, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If the permittee does not operate the engine according to the requirements in (a) through (c) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet the applicable requirements for a non-emergency engine.

- (a) There is no limit on the use of any engine during emergency situations.
- (b) The permittee may operate the engine for maintenance checks and readiness testing for a maximum of one hundred (100) hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the MDEQ 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, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, unless the permittee meets the criteria in 40 CFR 63.6640(f)(4)(i) or (ii); Subpart ZZZZ as applicable.

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

3.12 For 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 and Table 2d (Item 4); Subpart ZZZZ	4.1	HAPs	Conduct Routine Maintenance
	40 CFR 63.6605; Subpart ZZZZ	4.2		General Compliance Requirements

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 within one (1) year and thirty (30) days of the previous change (whichever comes first);
- (b) Inspect the air cleaner every one thousand (1,000) hours of operation or within 1 year and 30 days of the previous inspection (whichever comes first) and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or within 1 year and 30 days of the previous inspection (whichever comes first) and replace as necessary.

If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practices according to the schedule in (a)-(c) above, 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 must 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 63.6603(a) and Table 2d (Item 4); Subpart ZZZZ)

4.2 For Emission Point AD-107, the permittee shall, at all times, be in compliance with the applicable emission and operating limitations of Subpart ZZZZ and operate and maintain the engine, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to

make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the sources.

(Ref.: 40 CFR 63.6605; Subpart ZZZZ)

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-000 (Facility-Wide)	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	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 Totals for VOC and HAP Emissions
AA-100a AA-100b AA-100c	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.3	Opacity	Conduct Weekly VE Observations
AD-107	40 CFR 63.6625(e), (h) and (i); Subpart ZZZZ	5.4	HAPs	Operating Requirements
	40 CFR 63.6655(a), (d), (e), and (f); Subpart ZZZZ	5.5		Recordkeeping Requirements

- 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-000 (Facility-Wide), 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).)

- 5.3 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).)

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

- (a) Operate and maintain the engine 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 thirty (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 and filter change requirements.

- (1) The oil analysis shall be performed at the same frequency specified for changing the oil and filter.
- (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 and filter. If any of the limits are exceeded, the permittee shall change the oil and filter within two (2) business 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 and filter within 2 business 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 keep the following records:

- (a) A copy of each notification and report submitted to comply with Subpart ZZZZ;
- (b) Records of the occurrence and duration (in hours) 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 40 CFR 63.10(b)(2)(viii), Subpart A;
- (d) Records of all required maintenance performed on the air pollution control and monitoring equipment;
- (e) Records of actions taken during periods of malfunction to minimize emissions including corrective actions to restore malfunctioning engine and air pollution control and monitoring equipment to its normal or usual manner of operation;
- (f) Records to show continuous compliance with Condition 5.4(a);

- (g) Records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) was operated and maintained according to the maintenance plan; and
- (h) Records of the hours of operation of the engine (recorded through the non-resettable hour meter) including how many hours are spent for non-emergency and emergency operation and what classified the operation as emergency.

(Ref: 40 CFR 63.6655(a), (d), (e) and (f); 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
AD-107	40 CFR 63.6640(b), 63.6650(c) and (d); Subpart ZZZZ	6.5	Deviations Reporting
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.6	Submit the Hours of Operation (Non-Emergency and Emergency)

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 AD-107, the permittee shall report each instance in which the operating limitation in Condition 4.1 was not met. These instances are deviations from the operating limitations of Subpart ZZZZ. These deviations must be reported in accordance with Condition 6.2 and the report shall contain the following information:
- (a) Company name and address;
 - (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - (c) Date of report and beginning and ending dates of the reporting period;
 - (d) If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with Condition 4.2, including actions taken to correct a malfunction;
 - (e) The total operating time (in hours) of the stationary RICE at which the deviation occurred during the reporting period;
 - (f) Information on the number, duration (in hours), and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(Ref.: 40 CFR 63.6640(b), 63.6650(c) and (d); Subpart ZZZZ)

- 6.6 For Emission Point AD-107, the permittee shall submit a monitoring report, in accordance with Condition 6.2, that details the hours the engine operated in non-emergency and emergency situations and what classified the situation as emergency.

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