

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

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

THIS CERTIFIES THAT

ABB Motors and Mechanical Inc
70 Industrial Park Access Road
Columbus, Mississippi
Lowndes County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: _____

Permit No.: 1680-00065

Effective Date: As specified herein.

Expires: [No more than 5 years from the issue 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 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)
3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)
4. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission.

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

9. Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

10. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

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

11. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

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

- (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166; or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166;
- e. An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I or 40 CFR 51.166; or
- f. Any change in ownership of the stationary source.

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

B. GENERAL OPERATIONAL CONDITIONS

1. Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation, 11 Miss. Admin. Code Pt. 2, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

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

2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."

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

3. Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29 1.a(i and ii))

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

- a. Upsets

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

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

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

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

5. Compliance Testing: Regarding compliance testing:

- a. The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
- b. Compliance testing will be performed at the expense of the permittee.
- c. Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) Detailed description of testing procedures;
 - (2) Sample calculation(s);
 - (3) Results; and
 - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

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

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

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

2. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

3. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

4. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:
 - a. Persistent violation of any terms or conditions of this permit.
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - c. A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

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

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

SECTION 2 EMISSION POINT DESCRIPTION

The permittee is authorized to operate air emissions equipment, as described in the following table.

Emission Point	Description
AA-000	Facility-Wide (ABB Motors and Mechanical, Inc.)
AA-100	Surface Coating Operations (includes five (5) spray booths (three (3) assembled motor coating booths (two manual; one robotic), one (1) die-cast priming booth, and one (1) rotor priming booth), varnish coating operations, and paint mixing room)
AB-001	2.60 MMBTU / Hour Natural Gas-Fired Varnish System Cure Oven
AB-002	Two (2) Natural Gas-Fired Vacuum-Pressure Impregnation (VPI) System Cure Ovens (Individual Heat Input Capacity: 0.50 MMBTU / Hour)
AB-003	0.80 MMBTU / Hour Natural Gas-Fired Varnish Burn-Off Oven
AB-005	Forty-Four (44) Natural Gas-Fired Space Heaters (Total Heat Input Capacity: 27.83 MMBTU / Hour)
AB-006	Nine (9) Natural Gas-Fired Brazing Torches (Total Heat Input Capacity: 0.90 MMBTU / Hour)
AB-007	Two (2) Natural Gas-Fired Waste Water Evaporator (Individual Heat Input Capacity: 0.327 MMBTU / Hour; the water phase of waste water is evaporated in order to create sludge for disposal / recycling)
AC-100	Miscellaneous Metal Working and Maintenance (e.g. drilling, cutting, grinding, welding, stamping, assembly activities to manufacture motor components, part washers, etc.)
AD-001	168 HP Diesel-Fired Emergency Generator Engine (Heat Input Capacity: 0.43 MMBTU / Hour; manufactured in March 2006) equipped with 230-gal diesel belly tank
AD-002	308 HP Diesel-Fired Emergency Generator Engine (Heat Input Capacity: 0.79 MMBTU / Hour; manufactured in August 2005) equipped with 410-gal diesel belly tank
AE-001	345-Gallon Above-Ground Paint Thinner Storage Tank
AE-002	525-Gallon Above-Ground Varnish Storage Tank / VPI Reservoir Tank

**SECTION 3
EMISSION LIMITATIONS AND STANDARDS**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-000 (Facility-wide)	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.1	VOCs	≤ 99.0 tpy (Rolling 12-month period)
		3.2	HAPs	≤ 9.00 tpy (Individual) (Rolling 12-month period) ≤ 24.00 tpy (Total) (Rolling 12-month period)
	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.3	Opacity	≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.4		≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.5	PM	$E = 4.1(p)^{0.67}$
AD-001 AD-002 AB-001 AB-002 AB-003 AB-005 through AB-007	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.6	PM	0.6 Pounds Per MMBTU / Hour Heat Input
AB-001 AB-002 AB-003 AB-005 through AB-007	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.7	SO ₂	500 Parts Per Million by Volume
AC-100	40 CFR Part 63, Subpart XXXXXX National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories 40 CFR 63.11514(a)(1), (b)(2) and (5), and (c), 63.11522, and 63.11523, Subpart XXXXXX	3.8	HAPs	Applicability
AD-001 AD-002	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.9	SO ₂	4.8 Pounds / MMBTU Heat Input

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AD-001 AD-002	40 CFR Part 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6585(a), (c), 63.6590(a)(1)(iii), 63.6665, and Table 8, Subpart ZZZZ	3.10	HAPs	Applicability
	40 CFR 63.6640(f)(1), (2), and (4), Subpart ZZZZ	3.11	HAPs	100 Hours of Non-Emergency Operation Per Calendar Year for Each Engine
	40 CFR 63.6625(f), Subpart ZZZZ; and 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).	3.12	Hours of Operation	Operate and Maintain a Non-Resettable Hour Meter

3.1 For the entire facility, the permittee shall limit the total emission of volatile organic compounds (VOCs) from all emission points 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).)

3.2 For the entire facility, the permittee shall limit the respective emissions of any individual hazardous air pollutant (HAP) to no more than 9.00 tpy based on a rolling 12-month period. Additionally, the permittee shall limit the total emissions of all HAPs combined to no more than 24.00 tpy based on a rolling 12-month period.

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

3.3 For the entire facility, the permittee shall not cause, permit, or allow the emissions of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal which exceeds forty percent (40%) opacity, except that startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup 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.)

3.4 For the entire facility, 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 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1). This shall not apply to vision obscuration caused by uncombined water droplets.

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

- 3.5 For the entire facility except as otherwise specified, the permittee shall not cause, permit, or 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.

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

- 3.6 For the AD-001, AD-002, AB-001, AB-002, AB-003, and AB-005 through AB-007, the maximum emission of ash and/or PM from each fossil fuel burning installation shall not exceed 0.6 pounds per million BTU (MMBTU) per hour heat input.

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

- 3.7 For Emission Points AB-001, AB-002, AB-003, and AB-005 through AB-007, except as otherwise provided herein, the permittee shall not cause the emission of gas containing sulfur oxides, measured as sulfur dioxide (SO₂), from any process equipment in excess of five hundred (500) parts per million by volume (ppm_v).

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

- 3.8 For Emission Point AC-100, the permittee is subject and will comply with all applicable requirements found in 40 CFR Part 63, Subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, and in 40 CFR Part 63, Subpart A – General Provisions.

For the purposes of this permit, miscellaneous metal working and maintenance activities are considered existing machining and welding equipment and activities that use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), and a material is considered as containing MFHAP if it contains cadmium, chromium, lead, or nickel in amounts great than or equal to 0.1 percent by weight (wt.%) as the metal or if it contains manganese in amounts greater than or equal to 1.0 wt.% as the metal.

(Ref.: 40 CFR 63.11514(a)(1), (b)(2) and (5), and (c), 63.11522, and 63.11523, Subpart XXXXXX)

- 3.9 For Emission Points AD-001 and AD-002, except as otherwise specified or limited herein, the maximum discharge of sulfur dioxides from each engine shall not exceed 4.8 pounds SO₂ per MMBTU heat input.

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

- 3.10 For Emission Points AD-001 and AD-002, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, and in 40 CFR Part 63, Subpart A – General Provisions, as specified in Table 8 to 40 CFR Part 63, Subpart ZZZZ.

(Ref.: 40 CFR 63.6585(a), (c), 63.6590(a)(1)(iii), 63.6665, and Table 8, Subpart ZZZZ)

- 3.11 For Emission Points AD-001 and AD-002, 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 (a) through (c) below, the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ 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 shall be limited to a maximum of one hundred (100) hours per calendar years. 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 years 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 63.6640(f)(1), (2), and (4), Subpart ZZZZ)

- 3.12 For Emission Points AD-001 and AD-002, the permittee shall operate and maintain a non-resettable hour meter on each engine.

(Ref.: 40 CFR 63.6625(f), Subpart ZZZZ; and 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).)

SECTION 4 WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
AC-100	40 CFR 63.11516(b) and 63.11522 “ <i>Machining</i> ”, Subpart XXXXXX	4.1	MFHAPs	Implement Management Practices (Machining Activities)
	40 CFR 63.11516(f)(2), Subpart XXXXXX	4.2	MFHAPs	Implement Management Practices (Welding Activities)
AD-001 AD-002	40 CFR 63.6625(h), Subpart ZZZZ	4.3	HAPs	Minimize Idling During Start-Up (\leq 30 Minutes for a Start-Up Period)
	40 CFR 63.6603(a), Table 2d, Item 4, and 63.6625(i), Subpart ZZZZ; and 11 Miss. Admin. Code Pt.2, R. 2.2.B(11).	4.4	HAPs	Routine Maintenance Requirements
	40 CFR 63.6625(e)(3), Subpart ZZZZ	4.5	HAPs	Operation in Accordance with Manufacturer’s Instructions / Site Specific Maintenance Plan

4.1 For Emission Point AC-100, the permittee shall implement the following management practices to minimize the emissions of MFHAPs as a result of each applicable “*machining activity*” including milling, drilling, boring, tapping, planning, broaching, sawing, cutting, shaving, shearing, threading, reaming, shaping, slotting, hobbing, and chamfering:

- (a) The permittee shall take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and
- (b) The permittee shall operate all equipment associated with machining according to manufacturer's instructions.

These requirements do not apply when applicable machining operations are being performed that do not use any materials containing MFHAP and do not have the potential to emit MFHAP.

(Ref.: 40 CFR 63.11516(b) and 63.11522 “*Machining*”, Subpart XXXXXX)

4.2 For Emission Point AC-100, the permittee shall implement one or more of the following management practices to minimize the emission of MFHAPs as practicable as a result of welding activities while maintaining the required welding quality through the application of sound engineering judgement:

- (a) Use welding processes with reduced fume generation capabilities;

- (b) Use welding process variations that can reduce fume generation rates;
- (c) Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation;
- (d) Optimize welding process variables including electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed to reduce the amount of welding fume generated; and
- (e) Use a welding fume capture and control system operated according to the manufacturer's specifications.

The requirements do not apply when welding activities are being performed that do not use any materials containing MFHAPs or do not have the potential to emit MFHAPs.

(Ref.: 40 CFR 63.11516(f)(2), Subpart XXXXXX)

- 4.3 For Emission Points AD-001 and AD-002, the permittee shall minimize the time spent at idle during start-up and minimize the start-up time to a period needed for appropriate and safe loading of an engine, not to exceed thirty (30) minutes.

(Ref.: 40 CFR 63.6625(h), Subpart ZZZZ)

- 4.4 For Emission Points AD-001 and AD-002, except during periods of start-up, the permittee shall change the oil and filter in each engine every five hundred (500) hours of operation or within one (1) year and thirty (30) days of the previous change, whichever comes first. The permittee shall 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. The permittee shall 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.

The permittee has the option of utilizing an oil and filter analysis program in order to extend the oil and filter change requirement for an engine in accordance with the following provisions:

- (a) The oil and filter analysis shall be performed either every 500 hours of operation or within 1 year and 30 days of the previous analysis, whichever comes first.
- (b) The analysis program shall at a minimum analyze the Total Base Number, viscosity, and percent water content. The condemning limits for each noted parameter are as follows:
 - (1) Total Base Number is less than thirty percent (30%) of the Total Base Number of the oil when new;

- (2) Viscosity of the oil has changed by more than twenty percent (20%) from the viscosity of the oil when new; and
- (3) Percent water content by volume is greater than 0.5

If none of the condemning limits are exceeded, the permittee is not required to change the oil and filter. However, 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 an engine is not in operation when the results of the analysis are received, the permittee shall change the oil and filter within two (2) business days or before commencing operation, whichever is later.

The permittee shall maintain records of the parameters that are analyzed as part of the program, the results of the analysis, and the following information for any oil and filter change performed on an engine:

- (c) The hour value displayed on the non-resettable meter; and
- (d) The date in which the oil and filter change was performed.

Additionally, the analysis program shall be part of the maintenance plan as specified in Condition 4.5(b) for an engine.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the oil and filter change on the required schedule, or if performing the oil and filter change on the required schedule would otherwise pose an unacceptable risk under Federal, state, or local law, the oil and filter change can be delayed until the emergency is over or the unacceptable risk under Federal, state, or local law has abated. The oil and filter change 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 oil and filter change on the schedule required and the Federal, state or local law under which the risk was deemed unacceptable.

(Ref.: 40 CFR 63.6603(a), Table 2d, Item 4, and 63.6625(i), Subpart ZZZZ; and 11 Miss. Admin. Code Pt.2, R. 2.2.B(11).)

4.5 For Emission Points AD-001 and AD-002, the permittee shall comply with one of the following options:

- (a) Operate and maintain the engine and the after-treatment control devices, if any, according to the manufacturer's emission-related instructions; or

- (b) Develop a site-specific 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.

(Ref.: 40 CFR 63.6625(e)(3), Subpart ZZZZ)

**SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS**

Emission Point	Applicable Requirement	Condition Number(s)	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 5 years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	HAPs VOCs	Calculate and Record Emissions (Monthly and Rolling 12-Month Period)
AA-100	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.3	HAPs VOCs	Record and Maintain Surface Coating Usage / Data (Monthly)
AC-100	40 CFR 63.11516(f)(3) and 63.11517(a-b), Subpart XXXXXX	5.4	Opacity	Conduct Visual Determinations of Fugitive Emissions (Welding Activities)
	40 CFR 63.11516(f)(4), Subpart XXXXXX	5.5		Perform Corrective Actions for Fugitive Emissions
	40 CFR 63.11516(f)(5) and 63.11517(c-d), Subpart XXXXXX	5.6		Conduct Visual Determinations of Fugitive Emissions (Welding Activities)
	40 CFR 63.11516(f)(6), Subpart XXXXXX	5.7		Perform Corrective Actions for Opacity (0% < Opacity ≤ 20%)
	40 CFR 63.11516(f)(7)(ii), (iii), (iv), and (8), Subpart XXXXXX	5.8		Revise a Site-Specific Welding Emissions Management Plan
	40 CFR 63.11519(c)(2), Subpart XXXXXX	5.9		Maintain Information Related to Visual Determinations of Fugitive Emissions
	40 CFR 63.11519(c)(3), Subpart XXXXXX	5.10		Maintain Information Related to Visual Determination of Emissions Opacity
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.11	MFHAPs	Record and Maintain Material and Operational Data (All Metal Working Activities) (Monthly)
AD-001 AD-002	40 CFR 63.6655(f)(2), Subpart ZZZZ; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.12	HAPs	Monitor and Record Hours of Operation (Emergency and Non-Emergency)

5.1 Except as otherwise specified or limited herein, the permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit upon request.

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

- 5.2 For the entire facility, the permittee shall record the respective total emission of each individual HAP, total HAPs, and VOCs in tons from all air emission sources on a monthly basis and for each consecutive 12-month period on a rolling basis.

Unless otherwise specified herein, the permittee shall include all reference data utilized to validate the calculated emissions including but not limited to operational data, applicable emission factors, and engineering determinations.

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

- 5.3 For Emission Point AA-100, the permittee shall monitor and record the total volume used monthly, in gallons, of any used coating material including but not limited to thinner, adhesive, epoxy, paint, and varnish. Additionally, the permittee shall maintain documentation for any coating material that includes at a minimum the following information:

- (a) Product name and identification;
- (b) The density in pounds per gallon;
- (c) The weight percentage (wt.%) of the VOC content;
- (d) The wt.% of any individual HAP; and
- (e) The total VOC emission rate, the individual HAP emission rate, and the total HAP emission rate in tpy based on a rolling 12-month period.

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

- 5.4 For Emission Point AC-100, the permittee shall perform and record a visual determination of welding fugitive emissions as specified by the following procedure at the primary vent, stack, exit, or opening from the building containing the welding activities:

- (a) Any visual determination of fugitive emissions must be performed according to the provisions outlined in EPA Test Method 22 of 40 CFR Part 60, Appendix A-7. Additionally, the permittee shall adhere to the following guidelines:
 - (1) The permittee must conduct a Method 22 test while welding activities are proceeding and under normal conditions; and
 - (2) The duration of any Method 22 test shall be at least fifteen (15) minutes, and visible emissions will be considered present if they are detected for more than six (6) minutes of any 15-minute period.

- (b) Perform visual determination of fugitive emissions once per day on each day while welding activities are conducted
- (c) If no visible fugitive emissions are detected in ten (10) consecutive daily Method 22 testing of welding activities and performed in accordance with (a)–(b) of this condition, the permittee may decrease the frequency of Method 22 testing to once every five (5) days of welding operations (one calendar week).

If visible fugitive emissions are detected during the decreased frequency period, the permittee shall revert to daily Method 22 testing in accordance with (a) – (b) of this condition during each day that welding activities are conducted.

- (d) If no visible emissions are detected in four (4) consecutive weekly Method 22 testing of welding activities and performed in accordance with (c) of this condition, the permittee may decrease the frequency of method 22 testing to once every twenty-one (21) days of welding activities (one calendar month).

If visible emissions are detected during the decreased frequency period, the permittee shall revert to weekly Method 22 testing in accordance with (c) of this condition.

- (e) If no visible emissions are detected in three (3) consecutive monthly Method 22 testing of welding activities and performed in accordance with (d) of this condition, the permittee may decrease the frequency of Method 22 testing to once every sixty (60) days of welding operations (three calendar months).

If visible emissions are detected during the decreased frequency period, the permittee shall revert to monthly Method 22 testing in accordance with (d) of this condition.

(Ref.: 40 CFR 63.11516(f)(3) and 63.11517(a-b), Subpart XXXXXX)

- 5.5 For Emission Point AC-100, upon the initial detection of fugitive emissions as a result of a visual determination performed in accordance with Condition 5.4, the permittee shall implement corrective actions that include, but are not limited to, the following procedures:

- (a) Inspecting welding fume source; and
- (b) Evaluating the proper operation and effectiveness of the management practices and / or fume control measures implemented in accordance with Condition 4.2.

After completing the mentioned corrective actions, the permittee shall perform a follow-up inspection for visible fugitive emissions in accordance with Condition 5.4(a) at the primary vent, stack, exit, or opening from the building containing the welding operations.

(Ref.: 40 CFR 63.11516(f)(4), Subpart XXXXXX)

5.6 For Emission Point AC-100, upon detection of fugitive emissions from more than one (1) visual determination in accordance with Condition 5.4 during any consecutive 12-month period, notwithstanding the results of any follow-up inspections required by Condition 5.5, the permittee shall comply with the following requirements:

(a) Within twenty-four (24) hours, the permittee shall perform a visual determination of emission opacity at the primary vent, stack, exit, or opening from the building containing welding operations.

The visual determination of emissions opacity shall be performed in accordance with the provisions outlined in EPA Test Method 9 of 40 CFR Part 60, Appendix A-4. Additionally, the permittee shall adhere to following guidelines

(1) The permittee must conduct a Method 9 test while welding activities are proceeding and under normal conditions; and

(2) The duration of any Method 9 test shall be thirty (30) minutes.

(b) In lieu of performing the procedure outlined in Condition 5.4(b) through (e), the permittee shall perform visual determinations of emissions opacity in accordance with the following schedule:

(1) Perform a visual determination of emissions opacity once per day on each day while welding activities are conducted.

(2) If the average of the 6-minute opacities recorded during ten (10) consecutive daily Method 9 tests of welding activities are performed in accordance with (a) and (b)(1) of this condition does not exceed twenty percent (20%), the permittee may decrease the frequency of EPA Method 9 testing to once per five (5) consecutive days of active welding activities (one calendar week).

If opacity greater than 20% is detected during the decreased frequency period, the permittee shall revert to daily Method 9 testing in accordance with (a) and (b)(1) of this condition during each that welding activities are conducted.

(3) If the average of the 6-minute opacities recorded during four (4) consecutive weekly Method 9 tests of welding activities are performed in

accordance with (b)(2) of this condition does not exceed 20%, the permittee may decrease the frequency of EPA Method 9 testing to once per every twenty-one (21) days of active welding activities (one calendar month).

If opacity greater than 20% is detected during the decreased frequency period, the permittee shall revert to weekly Method 9 testing in accordance with (b)(2) of this condition during each that welding activities are conducted.

- (4) If the average of the 6-minute opacities recorded during three (3) consecutive monthly Method 9 tests of welding activities are performed in accordance with (b)(3) of this condition does not exceed 20%, the permittee may decrease the frequency of EPA Method 9 testing to once per every one hundred twenty (120) days of active welding activities (six calendar months).

If opacity greater than 20% is detected during the decreased frequency period, the permittee shall revert to monthly Method 9 testing in accordance with (b)(3) of this condition during each that welding activities are conducted.

- (5) If the average of the 6-minute opacities recorded during two (2) consecutive monthly tests of welding activities and performed in accordance with (b)(3) of this condition does not exceed 20%, the permittee may revert to monthly Method 22 testing in accordance with Condition 5.4(d) and (e).

In lieu of reverting to Method 22 testing, the permittee may elect to continue performing Method 9 testing in accordance with (b)(3) and (4) of this condition.

(Ref.: 40 CFR 63.11516(f)(5) and 63.11517(c-d), Subpart XXXXXX)

- 5.7 For Emission Point AC-100, upon any visual determination of emissions opacity performed in accordance with Condition 5.6 that result in the average of the 6-minute opacities recorded equaling twenty percent (20%) or less but greater than zero percent (0%), the permittee shall implement corrective actions that include, but are not limited to, the following protocols:

- (a) Inspecting welding fume sources; and
- (b) Evaluating the proper operation and effectiveness of the management practices and/or fume control measures implemented in accordance with Condition 4.2.

(Ref.: 40 CFR 63.11516(f)(6), Subpart XXXXXX)

5.8 For Emission Point AC-100, upon any visual determination of emissions opacity performed in accordance with Condition 5.6 that results in the average of the 6-minute opacities recorded exceeding twenty percent (20%), the permittee shall adhere to the following requirements:

- (a) Within thirty (30) days of exceeding 20% opacity, the permittee shall prepare and implement a revised Site-Specific Welding Emissions Management Plan (SSWEMP) that contains the following information:
 - (1) Company name and address
 - (2) A list and description of all welding operations that are currently utilized;
 - (3) A list and description of all management practices and/or fume control methods currently employed for the welding activities at the time of the opacity exceedance
 - (4) A list and description of all management practices and/or fume control methods currently employed for welding activities; and
 - (5) A description of additional management practices and/or fume control methods to be implemented pursuant to triggering this requirement, and the projected date of implementation.

Any revisions to the SSWEMP shall contain copies of all previous plan entries.

- (b) During the revision of the SSWEMP, the permittee shall continue to perform and maintain records of the visual determination of emissions opacity beginning on a daily schedule as specified by Condition 5.6(a) and b(1).
- (c) The SSWEMP shall be updated annually if necessary to contain current information for Part (a)(1-3) of this condition and maintained on-site.

(Ref.: 40 CFR 63.11516(f)(7)(ii), (iii), (iv), and (8), Subpart XXXXXX)

5.9 For Emission Point AC-100, the permittee shall record and maintain the following information as it relates to any required visual determination of fugitive emissions from welding activities as specified in Condition 5.4:

- (a) The date and results of every visual determination of fugitive emissions;
- (b) A description of any corrective action(s) taken as a result of a conducted visual determination; and

- (c) The date and results of any follow-up visual determination of fugitive emissions performed after any corrective action(s) have been completed.

(Ref.: 40 CFR 63.11519(c)(2), Subpart XXXXXX)

- 5.10 For Emission Point AC-100, the permittee shall maintain the following information as it relates to any required visual determination of emissions opacity from welding opacities as specified by Condition 5.6:

- (a) The date of every visual determination of emissions opacity;
- (b) The average of the 6-minute opacities measured by a Method 9 test; and
- (c) A description of any corrective action(s) taken as a result of a performed Method 9 test

(Ref.: 40 CFR 63.11519(c)(3), Subpart XXXXXX)

- 5.11 For Emission Point AC-100, the permittee shall maintain documentation of the component concentration, by weight, of any material used in metal working operations, including but not limited to welding rods and/or wires, welding electrodes, and metal casings.

Additionally, the permittee shall monitor and record the following operational data monthly:

- (a) The quantity in pounds of all metal processed via a metal working related activity;
- (b) The quantity in pounds of welding wire and/or welding electrode consumed; and
- (c) The individual MFHAP emission rate and the total MFHAP emission rate in tpy based on a rolling 12-month period.

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

- 5.12 For Emission Points AD-001 and AD-002, 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 document what classified each occurrence as either an emergency or non-emergency.

(Ref.: 40 CFR 63.6655(f)(2), Subpart ZZZZ; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

SECTION 6 REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-000 (Facility-Wide)	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Report permit deviations within five (5) working days.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit certified annual monitoring report.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	All documents submitted to MDEQ shall be certified by a Responsible Official.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.4	Submit Annual Report of VOC and HAP Emissions
AA-100	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Submit Annual Report of Surface Coating Usage and Data
AC-100	40 CFR 63.11519(b)(5), (6), and (8), Subpart XXXXXX	6.6	Submit Annual Summary on Visual Determination and Opacity Exceedances
	40 CFR 63.11519(b)(9), Subpart XXXXXX; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.7	Submit Revised Site-Specific Welding Emissions Management Plan Annually (or Corresponding Negative Declaration)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.8	Submit Annual Report of Material Usage and Data (Metal Working)
AD-001 AD-002	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.9	Submit Annual Report on Hours of Operation (Non-Emergency and Emergency)

6.1 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within 5 working days of the time the deviation began.

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

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

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

- 6.3 Any document including notifications and/or reports required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official (RO) or the Duly Authorized Representative (DAR) 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 the entire facility, the permittee shall submit an annual report in accordance with Condition 6.2 that summarizes the total emission of VOCs, individual HAPs, and all HAPs combined from all applicable sources in tons both monthly and on a rolling 12-month period.

The report shall include all reference data utilized to validate the presented VOC and HAP emissions including all applicable emission factors and engineering judgement determinations.

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

- 6.5 For Emission Point AA-100, the permittee shall submit an annual report in accordance with Condition 6.2 that summarizes the following information for each coating material used:

- (a) Product name and identification;
- (b) The density in pounds per gallon
- (c) The total quantity in gallons of each surface coating used on a rolling 12-month period;
- (d) The wt.% of the VOC content; and
- (e) The wt.% of any individual HAP content

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

- 6.6 For Emission Point AC-100, the permittee shall submit an annual report in accordance with Condition 6.2 that detail the following information as it pertains to welding activities

- (a) Visual Determination of Fugitive Emissions:
 - (1) The date of every visual determination of fugitive emissions as specified by Condition 5.4 that resulted in detection of visible emissions;

- (2) A description of the corrective action(s) taken subsequent to detecting visible emissions; and
 - (3) The date and results of the follow-up visual determination of fugitive emissions after the corrective action(s).
- (b) Visual Determination of Emission Opacity:
- (a) The date of every visual determination of emissions opacity as specified by Condition 5.6;
 - (b) The average of the six-minute opacities as measured by Method 9 testing; and
 - (c) A description of any corrective action(s) taken subsequent to the test.
- (c) Exceedances of 20% Opacity as determined by Method 9 testing:
- (a) The date on which the exceedance occurred; and
 - (b) The average of the six-minute average opacities recorded during the visual determination of emissions opacity.

(Ref.: 40 CFR 63.11519(b)(5), (6), and (8), Subpart XXXXXX)

- 6.7 For Emission Point AC-100, the permittee shall submit a copy of the revised SSWEMP and any subsequent revisions annually in accordance with Condition 6.2.

If no subsequent revision(s) is made to the most recently submitted SSWEMP in a calendar year, the permittee shall notify the MDEQ in the corresponding annual report with a negative declaration

(Ref.: 40 CFR 63.11519(b)(9), Subpart XXXXXX; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.8 For Emission Point AC-100, the permittee shall submit an annual report in accordance with Condition 6.2 that details the following information:

- (a) The quantity in pounds of welding wire and/or welding electrode consumed based on a rolling 12-month period.
- (b) The quantity in pounds of all metal processed via metal working-related activity based on a rolling 12-month period;

- (c) The wt.% of any MFHAP present in metal processed, welding wire, and/or welding electrode

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

- 6.9 For Emission Points AD-001 and AD-002, the permittee shall submit an annual report in accordance with Condition 6.2 that summarizes 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.

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