STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Ardagh Metal Packaging USA Corp 10800 Marina Drive Olive Branch, Desoto 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 Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: _	- Personal State Control of the Cont
Effective Date:	As Specified Herein.
MISSIS	SSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD
	AUTHODIZED CICNATUDE
MISSISS	AUTHORIZED SIGNATURE SIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Expires:	Permit No.: 0680-00016

TABLE OF CONTENTS

APPENDIX	B COMPLIANCE ASSURANCE MONITORING (CAM) PLAN FOR EMISSION POINT AE-001	
APPENDIX	A LIST OF ABBREVIATIONS USED IN THIS PERMIT	
SECTION 7.	TITLE VI REQUIREMENTS	40
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS	39
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS	22
SECTION 4.	COMPLIANCE SCHEDULE	21
SECTION 3.	EMISSION LIMITATIONS & STANDARDS	16
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES	144
SECTION 1.	GENERAL CONDITIONS	3

SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(a).)

1.2 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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. 6.3.A.(6)(c).)

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.
 - (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be

revised or revoked to assure compliance with the applicable requirements.

- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the Mississippi Department of Environmental Quality (MDEQ) at least thirty (30) days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

1.5 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 permittee or, for information 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. 6.3.A.(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(d).)

1.7 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. 6.3.A.(5).)

- 1.8 The permittee shall pay to the MDEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order, which shall be issued in accordance with the procedure outlined in Mississippi Administrative Code, Title 11, Part 2, Chapter 6 "Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act".
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant

for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g. air emission factors); or other approaches such as engineering calculations (e.g. estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.(2).)

(d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the MDEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(8).)

1.10 Any document required by this permit to be submitted to the MDEQ shall contain a certification by a responsible official that states 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. 6.2.E.)

- 1.11 The permittee shall allow the MDEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to perform the following:
 - (a) Enter upon the permittee's premises where a Title V source is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) As authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C.(2).)

1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

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

1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

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

1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(1).)

- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) The provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) The ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(2).)

1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the MDEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C.(2)., R. 6.4.B., and R. 6.2.A.(1)(c).)

1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) The changes are not modifications under any provision of Title I of the Act;
- (b) The changes do not exceed the emissions allowable under this permit;
- (c) The permittee provides the Administrator and the Department with written notification in advance of the proposed changes [at least seven (7) days, or such other timeframe as provided in other regulations for emergencies] and the notification includes the following:
 - (1) A brief description of the change(s);
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- (d) The permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F.(1).)

1.19 Should the Executive Director of the MDEQ 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.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment" – and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act".

"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:
 - (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 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).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally-approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B.(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvi-cultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up

operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or an Emergency Air Pollution Episode Alert imposed by the Executive Director of the MDEQ and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (500) yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within fifty (50) yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

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

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:
 - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in Part (c) following are met.
 - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to

- minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The permittee submitted notice of the emergency to the MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

- 1.25 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 non-compliance, 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 start-ups 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 this 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, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

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

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

- 1.27 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).)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-100	Facility-Wide [Ardagh Metal Packaging USA, Corp.]
AA-000	Can Coating Preparation
AA-001	6.4 MMBTU / Hour Natural Gas-Fired Drying Oven
AA-002	4.7 MMBTU / Hour Natural Gas-Fired, Low Pressure Boiler
AA-004	3.85 MMBTU / Hour Natural Gas-Fired Inside Bake Oven (IBO)
AB-000	Can Coating Line No. 1
AB-001	Line No. 1 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AB-002]
AB-002	3.5 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AB-003	Line No. 1 Inside Spray Machines Bank [emissions from this unit are routed through AB-004]
AB-004	3.0 MMBTU / Hour Natural Gas-Fired IBO [emissions from this unit are routed to the RTO (Emission Point AE-001)]
AC-000	Can Coating Line No. 2
AC-001	Line No. 2 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AC-002]
AC-002	3.5 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AC-003	Line No. 2 Inside Spray Machines Bank [emissions from this unit are routed through Emission Point AC-004]
AC-004	3.0 MMBTU / Hour Natural Gas-Fired IBO [emissions from this unit are routed to the RTO (AE-001)]
AD-000	Can Coating Line No. 3
AD-001	Line No. 3 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AD-002]
AD-002	3.5 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AD-003	Line No. 3 Inside Spray Machines Bank [emissions from this unit are routed through Emission Point AD-004]

Emission Point	Description
AD-004	One (1) 3.0 MMBTU / Hour Natural Gas-Fired IBO [emissions from this unit are routed to the RTO (AE-001)]
	Miscellaneous Sources
AE-001	Regenerative Thermal Oxidizer (RTO) [equipped with a 2.89 MMBTU / hour natural gas-fired burner; controls emissions from Emission Points AB-004, AC-004, AD-004, AH-004 and AI-004]
AG-001	Inside Spray Machine[emissions from this unit are routed through AB-004]
AH-000	Can Coating Line #4
AH-001	Line No. 4 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AH-002]
AH-002	2.75 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AH-003	Line No. 4 Inside Spray Machines Bank [emissions from this unit are routed through Emission Point AH-004]
AH-004	6.05 MMBTU / Hour Natural Gas-Fired IBO [emissions from this unit are routed to the RTO (AE-001)]
AH-005	Line No. 4 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AH-006]
AH-006	2.75 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AI-000	Can Coating Line No. 5
AI-001	Line No. 5 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AI-002]
AI-002	2.75 MMBTU / Hour Natural Gas-Fired Printer Pin Oven
AI-003	Line No. 5 Inside Spray Machines Bank [emissions from this unit are routed through Emission Point AI-004]
AI-004	6.05 MMBTU / Hour Natural Gas-Fired IBO [emissions from this unit are routed to the RTO (AE-001)]
AI-005	Line No. 5 Printer, Ink, Over-Varnish, and Bottom Roll-Coat Applicator [emissions from this unit are routed through Emission Point AI-006]
AI-006	One (1) 2.75 MMBTU / Hour Natural Gas-Fired Printer Pin Oven

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. FACILITY-WIDE EMISSION LIMITATIONS & STANDARDS

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause 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 percent (40%) opacity subject to the exceptions provided below:
 - (a) Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) opacity and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one (1) hour.

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

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause or allow the discharge into the ambient air from any point source 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.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.A.3 The permittee shall not cause or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
 - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.
 - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gas-borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

B. EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable)	$E = 4.1 \ (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued March 22, 1994	3.B.2	VOCs	249.0 tpy (Rolling 12-Month Total)
	(PSD Avoidance Limit)			
AA-100 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued September 20, 2017	3.B.3	HAPs	9.0 tpy (Individual) 24.0 tpy (Total)
	(Major Source Avoidance Limits)			(Rolling 12-Month Totals)
	40 CFR Part 60, Subpart WW – Standards of Performance for Beverage Can Surface Coating 40 CFR 60.490(a) and (b); Subpart WW	3.B.4	VOCs	General Applicability
AB-001 AC-001 AD-001 AH-001 AH-005 AI-001 AI-005	40 CFR 60.492(a) and (b); Subpart WW	3.B.5	VOCs	0.29 Kilograms / Liter (or 2.42 Pounds / Gallon) of Coating Solids from Exterior Base Coating (Except Clear Base Coat)
				0.46 Kilograms / Liter (or 3.84 Pounds / Gallon) of Coating Solids from Clear Base Coating and Over-Varnish Coating (Volume-Weighted Calendar-Month
				Averages)
AB-003 AC-003 AD-003 AG-001 AH-003 AI-003	40 CFR 60.492(c); Subpart WW	3.B.6	VOCs	0.89 Kilograms / Liter (or 7.43 Pounds / Gallon) of Coating Solids from Inside Spray Coating Operations
				(Volume-Weighted Calendar-Month Average)
AE-001	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a); CAM	3.B.7	VOCs	General Applicability

3.B.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall not cause 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:

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

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.B.2 For Emission Point AA-100 (Facility-Wide), the permittee shall limit the total emission of volatile organic compounds (VOCs) from all applicable emission sources to no more than 249.0 tons per year (tpy) based on a rolling 12-month total.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued March 22, 1994 PSD Avoidance Limit)
- 3.B.3 For Emission Point AA-100 (Facility-Wide), the permittee shall limit the emission of hazardous air pollutants (HAPs) to no more than 9.0 tons per year (tpy) for any single HAP and no more than 24.0 tpy for all HAPs in total based on rolling 12-month totals.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued September 20, 2017 Major Source Avoidance Limits)
- 3.B.4 For Emission Points AB-001, AB-003, AC-001, AC-003, AD-001, AD-003, AG-001, AH-001, AH-003, AH-005, AI-001, AI-003, and AI-005, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 60, Subpart WW Standards of Performance for the Beverage Can Surface Coating Industry and 40 CFR Part 60, Subpart A General Provisions.

(Ref.: 40 CFR 60.490(a) and (b); Subpart WW)

- 3.B.5 For Emission Points AB-001, AC-001, AD-001, AH-001, AH-005, AI-001, and AI-005, the permittee shall comply with the following VOC emission standards:
 - (a) No more than 0.29 kilograms per liter (or 2.42 pounds per gallon) of coating solids (based on a volume-weighted calendar-month average) from exterior base coating operations, except clear base coat; and
 - (b) No more than 0.46 kilograms per liter (or 3.84 pounds per gallon) of coating solids (based on a volume-weighted calendar-month average) from clear base coating operations and over-varnish coating operations.

(Ref.: 40 CFR 60.492(a) and (b); Subpart WW)

3.B.6 For Emission Points AB-003, AC-003, AD-003, AG-001, AH-003 and AI-003, the permittee shall limit the emission of VOCs to no more than 0.89 kilograms per liter (or

7.43 pounds per gallon) of coating solids (based on a volume-weighted calendar-month average) from inside spray coating operations.

(Ref.: 40 CFR 60.492(c); Subpart WW)

3.B.7 For Emission Point AE-001, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a); Compliance Assurance Monitoring)

C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lb. / MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO_2	4.8 lb. / MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

3.C.2 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).)

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions (including emission limitations, standards, or work practices), by January 31 for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:
 - (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) Such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), and (d).)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. <u>GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS</u>
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
 - (a) The date, place as defined in the permit, and time of sampling or measurements;
 - (b) The date(s) analyses were performed;
 - (c) The company or entity that performed the analyses;
 - (d) The analytical techniques or methods used;
 - (e) The results of such analyses; and
 - (f) The operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 of each year for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E.

For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semi-annual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e. April 30, July 31, October 31, and January 31), and any required annual reports shall be submitted by January 31 following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).)

(Ref.: 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5); Subpart A)

5.A.5 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. 6.3.A.(3)(c)(2).)

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the MDEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

5.A.8 Unless otherwise specified in Section 4, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate upon permit issuance.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requirement
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.1	VOCs	General Performance Testing Requirements
AA-100 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R.	5.B.2	VOCs HAPs	Calculate and Record the Emission of Each Pollutant (Monthly and Rolling 12-Month Totals)
	6.3.A(3)(a)(2).	5.B.3		Maintain Information on Inks, Adhesives, Coatings, Solvents, or Other VOC- / HAP- Containing Materials
AB-001 AC-001 AD-001 AH-001 AH-005 AI-001 AI-005	40 CFR 60.493(b)(1); Subpart WW	5.B.4	VOCs	Calculate the Volume-Weighted Average Emissions for Each Calendar Month
AB-003 AC-003 AD-003 AG-001 AH-003 AI-003	40 CFR 60.493(b)(2)(ii) – (iv); Subpart WW	5.B.5	VOCs	Calculate the Volume-Weighted Average Emissions for Each Calendar Month
AB-003 AB-004 AC-003 AC-004 AD-003 AD-004	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.6	VOC Capture Efficiency	Conduct Performance Testing Biennially
AG-001 AH-003 AH-004 AI-003 AI-004		5.B.7	Capture System	Develop and Implement a Capture System Monitoring Plan
AE-001	40 CFR 60.493(b)(2)(i); Subpart WW 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.8	VOC Destruction Efficiency VOC Reduction Efficiency	Conduct Performance Testing Biennially

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requirement
	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.9	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature for the RTO (3-Hour Block Average)
	40 CFR 64.7(b) and (c); CAM	o and (c); CAM 5.B.10 Operation & Operation and Maintenance for Monitoring System(s)		Operation and Maintenance Requirements for Monitoring System(s)
	40 CFR 64.7(d); CAM	5.B.11	Corrective Action	Corrective Action Response to an Excursion / Exceedance of a CAM Indicator
	40 CFR 64.8; CAM 5.B.12	QIP	Upon Request by the MDEQ, Develop a Quality Improvement Plan (QIP)	
	40 CFR 64.9(b); CAM	5.B.13 CAM Records Maintain CAM Record	Maintain CAM Records as Specified	
	40 CFR 60.495(c)(1); Subpart WW 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.14	Combustion Chamber Temperature	Maintain Records When the Average Combustion Chamber Temperature is 28°C Below the Established Temperature

- 5.B.1 For Emission Point AA-100 (Facility-Wide), unless otherwise specified herein, the permittee shall conduct performance testing in accordance with the following requirements:
 - (a) Each test shall be conducted in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event;
 - (b) The permittee shall conduct a minimum of three (3) separate test runs for a performance test for a duration of at least one (1) hour;
 - As applicable, the permittee shall conduct a performance stack test at representative operating conditions. Operations during periods of start-up, shutdown, or nonoperation do not constitute "representative operating conditions". The permittee may not conduct performance tests during periods of malfunction. The permittee shall monitor and record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation;
 - (c) As applicable, the permittee shall conduct a performance stack test at representative load conditions. For the purpose of this permit, "representative load conditions" is defined as the operation of the unit under heat input rates that will be typical in the future;

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

5.B.2 For Emission Point AA-100 (Facility-Wide), the permittee shall calculate and record the respective emission of VOCs, each individual HAP, and all combined HAPs in tons based on a monthly basis and on a rolling 12-month total basis.

For Emission Points AB-001, AB-002, AC-001, AC-002, AD-001, AD-002, AH-001, AH-002, AH-005, AH-006, AI-001, AI-002, AI-005, and AI-006, the permittee shall assume all VOCs and HAPs are emitted to the atmosphere from base coating operations and over-varnish coating operations.

For Emission Points AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AG-001, AH-003, AH-004, AI-003, and AI-004, the permittee shall apply the capture efficiency of each capture system (as determined by Condition 5.B.6) and the destruction efficiency of the regenerative thermal oxidizer (RTO) (as determined by Condition 5.B.8) to calculate the emission of VOCs and HAPs from inside spray coating operations.

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

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.3 For Emission Point AA-100 (Facility-Wide), the permittee shall maintain documentation that contains the following information for each ink, ink additive, adhesive, coating, solvent, or any other material that contains a VOC or HAP used on a monthly basis:
 - (a) The product name or identification;
 - (b) The volume used (in gallons);
 - (c) The VOC and/or HAP content (in weight percent) as well as description of the method used to determine the VOC and HAP content;
 - (d) The density (in pounds per gallon); and
 - (e) The solids content (in weight percent) (as applicable).

The permittee may utilize data supplied by either the manufacturer or an analysis of the VOC and/or HAP content by an applicable test method (i.e. EPA Test Method 24, EPA Test Method 311, and/or an alternative EPA-approved test method).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.4 For Emission Points AB-001, AC-001, AD-001, AH-001, AH-005, AI-001, and AI-005, the permittee shall demonstrate compliance with the VOC limitations specified in

Condition 3.B.5 by conducting a monthly performance test (calculations) in accordance with the following procedures:

- (a) The permittee shall determine the VOC content of each coating used from either formulation data supplied by the manufacturer of the coating or an analysis of the coating as received from the manufacturer in accordance with EPA Test Method 24. However, if using formulation data supplied by the manufacturer of a coating, the permittee may be still be required to determine the VOC content of a coating in accordance with EPA Test Method 24 (or either an equivalent method or an EPA-approved alternative method).
- (b) The permittee shall determine from company records the volume of coating and the mass of VOC-solvent added to coatings.
 - If a common coating distribution system serves more than one coating operation, the permittee shall estimate the volume of coating used at each coating operation by using the average dry weight of coating, the number of cans, and the size of cans being processed by each coating operation or by other procedures acceptable to the MDEQ.
- (c) The permittee shall calculate the volume-weighted average of the total mass of VOC per volume of coating solids used during each calendar month for each coating operation (except as provided in paragraph (e) of this condition) in accordance with the following procedures:.
 - (1) Calculate the mass of VOCs used $(M_o + M_d)$ in a calendar month for the affected coating operation by the following equation:

$$M_o + M_d = \sum_{i=1}^n [L_{c,i} D_{c,i} W_{o,i}] + \sum_{j=1}^m [L_{d,j} D_{d,j}]$$
 Eqn. 1

Where:

- M_o = The total mass of VOCs in the coatings consumed as received from the manufacturers, in kilograms or pounds;
- M_d = The total mass of VOC-containing solvents added to coatings, in kilograms or pounds.
- $L_{c,i}$ = The volume of each coating "i" consumed, in liters or gallons.
- $D_{c,i}$ = The density of each coating "i" as received from the manufacturer, in kilograms per liter or pounds per gallon;
- $W_{o,i}$ = The proportion of VOCs in each coating "i" as received from the manufacturer, as a fraction by weight;

 $L_{d,j}$ = The volume of each VOC-containing solvent "j" added to coatings, in liters or gallons.

 $D_{d,j}$ = The density of each VOC-containing solvent "j" added to coatings, in kilograms per liter or pounds per gallon.

n = The total number of different coatings used during the calendar month.

m = The total number of different VOC-containing solvents added to coatings used during the calendar month.

For the purpose of this equation, " $\sum_{j=1}^{m} [L_{d,j}D_{d,j}]$ " will be "zero" if no VOC-containing solvent is added to the coatings.

(2) Calculate the total volume of coating solids used (L_s) in a calendar month for the affected coating operation by the following equation:

$$L_{s} = \sum_{i=1}^{n} [L_{c,i}V_{s,i}]$$
 Eqn. 2

Where:

 L_s = The total volume of coating solids consumed, in liters or gallons;

 $L_{c,i}$ = The volume of each coating "i", consumed, in liters or gallons.

 $V_{s,i}$ = The proportion of solids in each coating, "i", as received from the manufacturer, as a fraction by volume.

(3) Calculate the volume-weighed average mass of VOC per volume of solids used during the calendar month for the each coating operation by the following equation:

$$G = \frac{M_o + M_d}{L_s}$$
 Eqn. 3

Where:

G = The volume-weighted average mass of VOCs in coatings consumed in a calendar month per unit volume of coating solids applied, in kilograms per liter or pounds per gallon.

 M_o = The total mass of VOCs in coatings consumed, in kilograms or pounds.

 M_d = The total mass of VOC-containing solvents added to coatings, in kilograms or pounds.

L_s = The volume of coating solids consumed, in liters or gallons.

(d) Calculate the volume-weighted average of VOC emissions discharged to the atmosphere during each calendar month for each coating operation by the following equation:

$$N=G$$
 Eqn. 4

Where:

N = The volume-weighted average mass of VOC emissions to the atmosphere per unit volume of coating solids applied, in kilograms per liter or pounds per gallons.

Where "N" is equal to or less than the applicable emission limit specified in Condition 3.B.5, the coating operation is in compliance.

(e) If each individual coating used in a coating operation has a VOC content equal to or less than the applicable emission limit specified in Condition 3.B.5, the coating operation is in compliance provided that no VOC-containing solvents are added to the corresponding coatings during distribution or application.

(Ref.: 40 CFR 60.493(b)(1); Subpart WW)

- 5.B.5 For Emission Points AB-003, AC-003, AD-003, AG-001, AH-003, and AI-003, the permittee shall demonstrate compliance with the VOC limitation specified in Condition 3.B.6 by conducting a monthly performance test (calculations) using the following procedures:
 - (a) Calculate the volume-weighted average of the total mass of VOC per volume of coating solids (G) used in a calendar month for each coating operation by using Equations (1), (2), and (3) outlined in Condition 5.B.4.
 - (b) Calculate the volume-weighted average of VOC emissions discharged to the atmosphere (N) during a calendar month by the following equation:

$$N = G(1 - R)$$
 Eqn. 5

Where:

N = The volume-weighted average mass of VOC emissions to the atmosphere per volume of coating solids applied, in kilograms per liter or pounds per gallon.

- G = The volume-weighted average mass of VOCs in coatings consumed in a calendar month per volume of coating solids applied, in kilograms per liter or pounds per gallon.
- R = The overall VOC emission reduction achieved, as a fraction, as determined by Condition 5.B.8.

If "N" is equal to or less than the applicable emission limit specified in Condition 3.B.6, each coating operation is in compliance.

(Ref.: 40 CFR 60.493(b)(2)(ii) – (iv); Subpart WW)

5.B.6 For Emission Points AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AG-001, AH-003, AH-004, AI-003, and AI-004, the permittee shall evaluate the VOC capture efficiency ("F") for each capture system by conducting a routine performance test biennially [and no later than twenty-four (24) months after the previously completed test] in accordance with Condition 5.B.1.

During each test, the permittee shall establish a differential pressure drop range (in inches of water) for each capture system by continuously monitoring and recording the pressure drop during each test run.

Each differential pressure drop range shall encompass an average minimum and average maximum reading measured over the span of the total test runs. The pressure drop range may be modified for a capture system based on subsequent performance testing required by this condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.7 For Emission Points AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AG-001, AH-003, AH-004, AI-003, and AI-004, the permittee shall develop and implement for each capture system a "Capture System Monitoring Plan" that shall contain the following information:
 - (a) The operating parameter(s) to be monitored to ensure the capture efficiency measured during the performance test is maintained;
 - (b) The reasoning for why the identified parameter(s) is appropriate for demonstrating continuous compliance with the capture efficiency measured during the most recent performance test required by Condition 5.B.6;
 - (c) The specific monitoring procedures;
 - (d) The operating limits for the capture system operating parameter value, or range of values, that demonstrate compliance with the capture efficiency measured during the performance test. The operating limits must represent the conditions indicative of proper operation and maintenance of the capture system; and

(e) A schematic showing the emission sources, venting system, thermal oxidizer, monitoring devices, and potential bypasses that could divert gases away from the thermal oxidizer.

As deemed necessary, the permittee shall revise the *Capture System Monitoring Plan* to address changes to applicable operations and/or to incorporate additional best management practices.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.8 For Emission Point AE-001, the permittee shall determine the destruction efficiency and the overall reduction efficiency of the RTO for VOCs by conducting performance testing biennially [and no later than twenty-four (24) months after the previously completed test]. The testing shall be done in accordance with Condition 5.B.1 and the following requirements:
 - (a) The VOC mass flow rate at the inlet and outlet of the thermal oxidizer shall be tested simultaneously.
 - (b) Determine the destruction efficiency of the thermal oxidizer using values of the volumetric flow rate of each of the gas streams and the VOC content of each of the gas streams in and out of the thermal oxidizer by the following equation:

$$E = \frac{\sum_{i=1}^{n} Q_{b,i} C_{b,i} - \sum_{j=1}^{m} Q_{a,j} C_{a,j}}{\sum_{i=1}^{n} Q_{b,i} C_{b,i}}$$
 Eqn. 6

Where:

E = The VOC destruction efficiency of the thermal oxidizer; as a fraction.

 $Q_{b,i}$ = The volumetric flow rate of gas stream, "i", entering the thermal oxidizer, in dry standard cubic meters per hour.

C_{b,i} = The VOC concentration in gas stream, "i", entering the thermal oxidizer, in parts per million by volume, as carbon.

Q_{a,j} = The volumetric flow rate of gas stream, "j", leaving the thermal oxidizer and entering the atmosphere; in dry standard cubic meters per hour.

 $C_{a,j}$ = The VOC concentration in gas stream, "j", leaving the thermal oxidizer and entering the atmosphere, in parts per million by volume; as carbon.

n = The number of gas streams entering the thermal oxidizer.

m = The number of gas streams leaving the thermal oxidizer and entering the atmosphere.

The VOC destruction efficiency shall be determined as the average of the efficiencies determined from the three (3) test runs.

(c) Determine overall reduction efficiency using the following equation:

$$R = EF$$
 Eqn. 7

Where:

R = The overall VOC emission reduction achieved; as a fraction.

E = The VOC destruction efficiency of the thermal oxidizer; as a fraction.

F = The portion of total VOCs emitted that enter the thermal oxidizer (i.e. capture efficiency), as a fraction, as determined by Condition 5.B.6.

The overall reduction efficiency shall be determined as the average of the efficiencies determined from the three (3) test runs.

(Ref.: 40 CFR 60.493(b)(2)(i); Subpart WW)

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

5.B.9 For Emission Point AE-001, the permittee shall continuously monitor and record the combustion chamber temperature for the regenerative thermal oxidizer (RTO) based on a 3-hour block average in accordance with the CAM Plan found in Appendix B of this permit. Also, the permittee shall respectively record the differential pressure for the capture systems and conduct a visual inspection of the burner flame at least once per day.

(Ref.: 40 CFR 64.3(a), (b), and 64.6(c); Compliance Assurance Monitoring)

- 5.B.10 For Emission Point AE-001, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
 - (a) *Proper Maintenance*: The permittee shall maintain the monitoring, including (but not limited to) maintaining necessary parts for routine repairs of the monitoring equipment at all times.
 - (b) Continued Operation: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities [including calibration checks and required zero and span adjustments (as applicable)], the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used [including in data averaging and calculations or in fulfilling a minimum data availability requirement, (as applicable)].

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring

malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c); Compliance Assurance Monitoring)

5.B.11 For Emission Point AE-001, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused start-up or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard (as applicable).

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d); Compliance Assurance Monitoring)

5.B.12 For Emission Point AE-001, based on the results of a determination made under Condition 5.B.11, the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b).

The QIP shall be developed and implemented within one hundred eighty (180) days of written notification from MDEQ that a QIP is required. The MDEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8; Compliance Assurance Monitoring)

5.B.13 For Emission Point AE-001, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to

Condition 5.B.12 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions (as applicable).

As applicable, records of monitoring data and monitoring performance data should include date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b); Compliance Assurance Monitoring)

5.B.14 For Emission Point AE-001, the permittee shall identify and record each 3-hour period in which cans are processed and the average combustion chamber temperature of the RTO is more than 28°C below the average combustion chamber temperature established during the most recent destruction efficiency performance test conducted in accordance within Condition 5.B.8.

Additionally, the permittee shall monitor and record each RTO downtime event (in hours) on a monthly basis and maintain adequate documentation that identifies the process line(s) operating (including the number of cans processed) while the RTO is not in operation.

(Ref.: 40 CFR 60.495(c)(1); Subpart WW)

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

C. <u>SPECIFIC REPORTING REQUIREMENTS</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-100 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.1	VOCs HAPs	Submit a Semi-Annual Monitoring Report
AB-003 AC-003 AD-003 AG-001 AH-003 AI-003	40 CFR 60.495(b); Subpart WW	5.C.2	VOCs	Submit a Quarterly Excess Emissions Report or a Negative Declaration Semi- Annually (As Applicable)
AB-003 AB-004 AC-003 AC-004 AD-003 AD-004 AG-001 AH-003 AH-004 AI-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.3	Capture System	Submit a Capture System Monitoring Plan
AB-003 AB-004 AC-003 AC-004 AD-003 AD-004 AE-001 AG-001 AH-003 AH-004 AI-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.4	VOC Reduction Efficiency Capture Efficiency	Performance Test Reporting Requirements
	40 CFR 64.9(a); CAM	5.C.5	CAM Reporting	Semi-Annual Reporting Requirements
AE-001	40 CFR 64.7(e); CAM	5.C.6	CAM Modification	Promptly Notify the MDEQ of Failure to Achieve Limit/Standard though No Excursion or Exceedance Was Indicated by Approved Monitoring

5.C.1 For Emission Point AA-100 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) in accordance with Condition 5.A.4 that contains the following information:

- (a) The total emission of VOCs, each individual HAP, and all combined HAPs on both a monthly and a rolling 12-month total basis;
- (b) For Emission Points AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AG-001, AH-003, AH-004, AI-003, and AI-004: Any revisions made to the "Capture System Monitoring Plan" during the reporting period;
- (c) For Emission Point AE-001:
 - (1) Each 3-hour period in which cans are processed and the average combustion chamber temperature of the RTO was more than 28°C below the average combustion chamber temperature established during the most recent destruction efficiency performance test conducted in accordance within Condition 5.B.8; and
 - (2) The RTO monthly downtime (in hours) and the process lines operating during each downtime.
 - (3) If no such periods as described in paragraphs (b)(1) and (b)(2) occur, the permittee shall state this in the report.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.2 For Emission Points AB-003, AC-003, AD-003, AG-001, AH-003, and AI-003, the permittee shall submit a quarterly report to the MDEQ in accordance with Condition 5.A.4 that details each instance in which the volume-weighted average total mass of VOCs per volume of coating solids calculated in accordance with Condition 5.B.5 is greater than the limit specified in Condition 3.B.6.

If no such instances occur during a particular quarter, the permittee shall submit the corresponding report to the MDEQ on a semi-annual basis in accordance with Condition 5.A.4.

(Ref.: 40 CFR 60.495(b); Subpart WW)

5.C.3 For Emission Points AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AG-001, AH-003, AH-004, AI-003, and AI-004, the permittee shall submit for each capture system a "Capture System Monitoring Plan" (as required by Condition 5.B.7) to the MDEQ no later than sixty (60) days after issuance of this permit.

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

5.C.4 For Emission Point AB-003, AB-004, AC-003, AC-004, AD-003, AD-004, AE-001, AG-001, AH-003, AH-004, AI-003, and AI-004, the permittee shall submit the following notifications, information, and reports for a performance test required by Conditions 5.B.6 and 5.B.8:

- (a) A written test protocol shall be submitted at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the MDEQ. If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.
- (b) After the first successful submittal of a written test protocol, the permittee may request that the submittal of a testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to the subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.
- (c) A notification about the testing event shall be submitted ten (10) days prior to the scheduled date(s) so that an observer may be afforded the opportunity to witness the test(s).
- (d) The performance test results shall be submitted to the MDEQ no later than sixty (60) days after the completion of the actual test. Additionally, the permittee shall submit a summary of any required periodic and/or parametric monitoring data recorded during the performance testing.

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

- 5.C.5 For Emission Point AE-001, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information, as applicable:
 - (a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.12. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a); Compliance Assurance Monitoring)

5.C.6 For Emission Point AE-001, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and (if necessary) submit a proposed modification to the permit to

address the necessary monitoring changes. Such a modification may include (but is not limited to) reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e); Compliance Assurance Monitoring)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at http://www.ecfr.gov/ under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances containing class I, class II or non-exempt substitute refrigerants;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as

well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
 - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

BACT Best Available Control Technology
CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality
EPA United States Environmental Protection Agency

gr / dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant

lb / hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards for Hazardous Air Pollutants, 40

CFR Part 61, or National Emission Standards for Hazardous Air

Pollutants for Source Categories, 40 CFR Part 63

NMVOC Non-Methane Volatile Organic Compounds

NO_X Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM₁₀ Particulate Matter less than 10 μ m in diameter PM_{2.5} Particulate Matter less than 2.5 μ m in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration

SIP State Implementation Plan

SO₂ Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction

TPY Tons per Year

TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant

VOHAP Volatile Organic Hazardous Air Pollutant

VOC Volatile Organic Compound

APPENDIX B

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN FOR EMISISON POINT AE-001 (REGENERATIVE THERMAL OXIDIZER)

	Indicators				
Indicator	Combustion Temperature determined from most recent performance testing	Differential Pressure of each Capture System associated with an IBO	Flame Color		
Measurement Approach	Continuously measure RTO combustion chamber temperature and record on a chart recorder	Measure differential pressure of each capture system using photophilic pressure gauge	Visual observation of flame color		
Monitoring Method and Location	RTO combustion chamber temperature	Gauges are located on RTO control panel.	Observe flame from observation port		
Indicator Range	> 1,385 °F [or temperature determined from most recent performance testing (-25 °F)]. An excursion is defined as a reading below the minimum temperature.	Maintain the static inlet pressure within the range of minus 0.0" of water and minus 2.5" of water (or the range determined from most recent performance testing). An excursion is defined as a reading outside this range.	Presence of blue flame. An excursion is defined as any observation noting a flame color indicative of poor or insufficient combustion.		
QA / QC Practices/Criteria	Equipment is maintained and operated to manufacturer's operation/maintenance plan and calibrated at least annually	Equipment is maintained and calibrated according to the manufacturer's operation and maintenance plan	Observation port kept clean or replaced as needed. Observer shall be trained to identify flame color and indication of proper operation of the RTO.		
Monitoring Continuous monitoring Frequency		Daily monitoring	Daily observations		
Data Collection Procedures	Electronically monitor temperatures continuously	Daily log noting observer, inches of water, and any corrective action taken	Daily log noting observer, flame color, and any corrective action		