## STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

#### THIS CERTIFIES THAT

Pregis LLC
1867 South Veterans Boulevard
Tupelo, Mississippi
Lee 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 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.

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Permit No.: 1540-00118

**Expires:** [Date not to exceed 5 years from issuance]

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT APPENDIX B COMPLIANCE ASSURANCE MONITORING PLAN

#### SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance 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 3 or more years. Such a reopening shall be completed no later than 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 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) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 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 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 permittee or, for information to be confidential, the permittee shall furnish such records to 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. 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 DEQ 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 Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.
  - (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 DEQ 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 DEQ 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.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
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- 1.11 The permittee shall allow the DEQ, 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 or emissionsrelated 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.

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

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

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
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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 permit. If the permittee submits a timely and complete application, the failure to have a Title V permit 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 DEQ 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 time frame as provided in other regulations for emergencies) and the notification includes:

- (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 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 11 Miss. Admin. Code Pt. 2, Ch. 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 Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment," and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 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 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, silvicultural 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 Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
  - (a) Open burning without a forced-draft air system must not occur within 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 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private airfields, 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 noncompliance 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 (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 DEQ within 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, startups, 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 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 in 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.)

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 Regulation 11 Miss Admin. Code Pt. 2, R. 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.)

#### SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

<b>Emission Point</b>	Description
	Polyethylene (PE) Foam Process
AA-003	Containment Rooms are controlled by Emission Point AA-006. Regrind is controlled by Cyclone and Dust Filters to be
	vented indoors. Reclaim Day Bin and Resin Day Bin controlled by Dust Filter to be vented indoors.
AA-006	5.4 MMBtu/hr Natural gas-fired Recuperative Thermal Oxidizer

#### 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, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
  - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
  - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.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 For the entire facility, the permittee shall not cause, permit, 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 gasborne 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.)

3.A.4 Except as otherwise specified or limited herein, the permittee shall not cause or allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship

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

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).)

#### B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
Facility Wide	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit (TVOP) issued August 11, 2008  Prevention of Significant Deterioration (PSD) Avoidance Limit	3.B.1	VOC	Emissions shall not exceed 240 tons per year.
AA-003 AA-006	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP modified DATE.  PSD Avoidance Limit	3.B.2	VOC PM <sub>10</sub> PM <sub>2.5</sub>	Shall operate each control device while processing.
AA-003	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit (TVOP) modified DATE.  PSD Avoidance Limit	3.B.3	VOC	Shall route all Containment Room emissions to Emission Point AA-006.
	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP modified DATE.	3.B.4	PM <sub>10</sub> PM <sub>2.5</sub>	Shall route all Day Bin, Reclaim, and Regrind emissions to control devices.
	11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a).	3.B.5	PM (Filterable Only)	0.6 lbs/MMBTU
AA-006	11 Miss. Admin. Code Pt. 2, R.1.4.A(1).	3.B.6	$SO_2$	4.8 lbs/MMBTU
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP issued August 11, 2008 PSD Avoidance Limit	3.B.7	Oxidation Chamber Temperature	Maintain temperature of 1250°F or greater.
AA-006	40 CFR 64 Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a), CAM	3.B.7	VOC	CAM Applicability

3.B.1 For the entire facility, the permittee shall limit Volatile Organic Compound emissions to 240 tons per year, as determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall consider, but is not limited to, engineering calculations, EPA AP-42 guidance, pounds of plastic input, the hours of operation of each process line, the hours of operation of the thermal oxidizer, thermal oxidizer destruction removal efficiency (DRE), and the manufacturer's specifications for each VOC containing material used.

- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP issued August 11, 2008. [PSD Avoidance])
- 3.B.2 For Emission Points AA-003 and AA-006, the permittee shall operate each cyclone, dust collector, and the Recuperative Thermal Oxidizer (Emission Point AA-006) at all times when processing. Should the control devices become nonoperational then the respective process shall be shutdown immediately, but not as to cause damage to equipment or property, or cause further environmental problems. The process shall not startup until such time that the control device(s) become operational. The permittee shall maintain on hand at all times sufficient equipment as is necessary to repair and/or overhaul baghouse and the exhaust fans with dry filter. The permittee shall conduct maintenance and quality assurance/quality control measures in accordance with the manufacture's specifications.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP modified DATE. [PSD Avoidance])
- 3.B.3 For Emission Point AA-003, the permittee shall route all Containment Room emissions to the Recuperative Thermal Oxidizer (Emission Point AA-006) for control.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP modified DATE. [PSD Avoidance])
- 3.B.4 For Emission Point AA-003, the permittee shall route all Day Bin, Reclaim, and Regrind emissions to the control device of each respective source for control.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP modified DATE.)
- 3.B.5 For Emission Point AA-006, 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.B.6 For Emission Point AA-006, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by

indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.B.7 For Emission Point AA-006, the permittee shall operate the thermal oxidation chamber at temperatures no less than 1250°F to ensure at least an 87% DRE of VOC emissions. The temperature of the thermal oxidation chamber shall be determined using a thermocouple within the thermal oxidation chamber.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the TVOP issued August 11, 2008. [PSD Avoidance])

3.B.8 For Emission Point AA-006, the permittee is subject to and shall comply with all applicable requirements of the Compliance Assurance Monitoring (CAM) program (40 CFR Part 64).

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

#### C. Insignificant and Trivial Activity Emission Limitations & Standards

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

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#### 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), & (d).)

## SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 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. Support 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 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 11 Miss. Admin. Code Pt. 2, R. 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 semiannual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30th, July 31st, October 31st, and January 31st), and any required annual reports shall be submitted by January 31st following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1)., 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5))

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. Said 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 DEQ 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, upon permit issuance, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate.

(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
Facility Wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.1	VOC	Daily recordkeeping
AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.2	PM <sub>2.5</sub> PM <sub>10</sub>	Monthly Maintenance Inspections and Malfunction Recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.3	DRE	Conduct stack test if another DRE is to be used.
	40 CFR 64.3(a) and (b), 64.6(c), CAM	5.B.4	VOC	CAM Plan: Monitor oxidation chamber temperature using thermocouple.
AA-006	40 CFR 64.7(b) and (c), CAM	5.B.5	Operation & Maintenance	Operation and maintenance requirements for monitoring system(s)
	40 CFR 64.7(d), CAM	5.B.6	Corrective Action	Corrective Action response to an excursion/exceedance of a CAM indicator
	40 CFR 64.8, CAM	5.B.7	QIP	Upon request by DEQ, develop a Quality Improvement Plan (QIP)
	40 CFR 64.9(b), CAM	5.B.8	CAM Records	Maintain CAM records as specified

5.B.1 For the entire facility, the permittee shall keep daily records of the pounds of plastic input, the hours of operation of each process line, and the hours of operation of the thermal oxidizer. The permittee shall use the data collected, actual isobutane inventory levels, and a minimum DRE of 87% to calculate the VOC emissions on a monthly basis and a rolling 12-month total.

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

- 5.B.2 For Emission Point AA-003, the permittee shall demonstrate compliance with Condition 3.B.4 by performing monthly maintenance inspections on each cyclone and dust collector to ensure the control device is operating as designed. A record shall be kept in log form and shall include the following:
  - (a) date of the inspections,
  - (b) name of the inspector, and;
  - (c) any maintenance conducted during the monthly inspection.

All maintenance inspection and repair records shall be kept on site and made available for DEQ review upon request.

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

- 5.B.3 For Emission Point AA-006, should the permittee want to use a DRE other than 87%, the permittee shall conduct a performance test in accordance with the following during the first semiannual reporting period that the permittee chooses to use a different DRE:
  - (a) The performance test shall establish the destruction efficiency of the oxidizer and the associated combustion zone temperature for a thermal oxidizer in accordance with the following reference methods and procedures:
    - (1) Method 1 or 1A of 40 CFR 60, Appendix A is used for sample and velocity traverses to determine sampling locations.
    - (2) Method 2, 2A, 2C, or 2D of 40 CFR 60, Appendix A is used to determine gas volumetric flow rate.
    - (3) Method 3 of 40 CFR 60, Appendix A is used for gas analysis to determine dry molecular weight.
    - (4) Method 4 of 40 CFR 60, Appendix A is used to determine stack gas moisture.
    - (5) Methods 2, 2A, 3, and 4 of 40 CFR 60, Appendix A shall be performed, as applicable, at least twice during each test period.
    - (6) Method 25 of 40 CFR 60, Appendix A, shall be used to determine organic volatile matter concentration. The same method must be used for both the inlet and outlet measurements.
    - (7) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.

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

5.B.4 For Emission Point AA-006, the permittee shall monitor the temperature of the oxidation chamber determined by the thermocouple and conduct weekly inspections of the thermal oxidizer in accordance with the CAM Plan found in Appendix B of the permit.

(Ref.: 40 CFR 64.3(a) and (b), 64.6(c), CAM)

- 5.B.5 For Emission Point AA-006, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
  - (a) *Proper maintenance*. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
  - (b) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), 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), CAM)

5.B.6 For Emission Point AA-006, 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 startup, 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 startup 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), CAM)

5.B.7 For Emission Point AA-006, based on the results of a determination made under Condition 5.B.5, the DEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b), CAM. The QIP shall be developed and implemented within 180 days of written notification from DEQ that a QIP is required. The DEQ 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. 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, CAM)

5.B.8 For Emission Point AA-006, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.6 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

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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), CAM)

#### C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
Facility Wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.1	Plastic Input Hours of Operation VOC	Submit Semiannual Report
AA-006	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.2	Performance Test	Submit Stack Test
	40 CFR 64.9(a), CAM	5.C.2	CAM Reporting	Semiannual reporting requirements
	40 CFR 64.7(e), CAM	5.C.3	CAM Modification	Promptly notify DEQ of failure to achieve limit/standard though no excursion or exceedance was indicated by approved monitoring

- 5.C.1 For the entire facility, permittee shall submit a semiannual report, in accordance with Condition 5.A.4, containing the following:
  - (a) records of the pounds of plastic input,
  - (b) the hours of operation of each process line,
  - (c) the hours of operation of the thermal oxidizer, and;
  - (d) VOC emissions in tpy on a monthly basis and for each consecutive 12-month period on a rolling total.

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

- 5.C.2 For Emission Point AA-006, the permittee shall submit a written test protocol at least 30 days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to DEQ. Also, the permittee shall notify DEQ in writing at least 10 days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test. The results of the stack test shall be submitted within 60 days of completing the test.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.C.3 For Emission Point AA-006, the permittee shall submit reports, in accordance with Condition 5.A.4, of the following information, as applicable:

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(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.7. 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), CAM)

5.C.4 For Emission Point AA-006, 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), CAM)

#### SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 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 <a href="http://www.ecfr.gov/">http://www.ecfr.gov/</a> 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 61, or National Emission Standards for Hazardous Air

Pollutants for Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO<sub>x</sub> Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

 $\begin{array}{ccc} PM_{10} & Particulate \ Matter \ less \ than \ 10 \ \mu m \ in \ diameter \\ PM_{2.5} & Particulate \ Matter \ less \ than \ 2.5 \ \mu m \ in \ diameter \end{array}$ 

ppm Parts per Million

PSD Prevention of Significant Deterioration

SIP State Implementation Plan

SO<sub>2</sub> 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 Plan**

# COMPLIANCE ASSURANCE MONITORING AA-003, Polyethylene (PE) Foam Process 5.4 MMBTU/hr Natural Gas-Fired Thermal Oxidizer

#### I. Background

#### A. Emission Unit

Description: Polyethylene (PE) Foam Process with a 5.4 MMBTU/hr Natural

Gas-Fired Thermal Oxidizer

Identification: Emission Point AA-003

Facility: Pregis Innovative Packaging, Tupelo, Mississippi

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 240 tons per year (tpy) volatile organic compounds (VOC) limit

established in the federally enforceable Title V Operating Permit

issued on August 11, 2006.

Emission limits: 240 tpy VOC limit

Monitoring Requirements: Temperature and Equipment Inspection

C. Control Technology

Destruction of VOC in thermal oxidizer

#### II. Monitoring Approach

The key elements of the monitoring approach are presented in Table A.

Table A. Monitoring Approach for Polyethylene Foam Process with a 5.4 MMBTU/hr Natural Gas-Fired Thermal Oxidizer (AA-003) for controlling VOC Emissions.

	Indicator No. 1	Indicator No. 2
I. Indicator	Chamber Temperature	Equipment Inspection
Measurement Approach	The chamber temperature is monitored with a thermocouple.	The thermal oxidizer will be inspected on a weekly basis to ensure that the process is properly controlled.
II. Indicator Range	An excursion is defined as temperature readings less than 1250 °F; excursions trigger an inspection and corrective action.	An excursion occurs when a weekly inspection is not performed.
QIP Threshold	Not more than 6 excursions in any semi-annual reporting period.	Not more than 1 excursion in any semi-annual reporting period.
III. Performance Criteria  A. Data Representativeness	Measurements are taken from the thermal oxidizer chamber.	Inspections and maintenance will be conducted on the thermal oxidizer.
B. Verification of Operational Status	N/A	N/A
C. QA/QC Practices and Criteria	The thermocouple will be maintained in accordance with suggested manufacturer's recommendations or other best practices.	Weekly inspections and any required maintenance is performed as necessary to ensure that the equipment is maintained, and operated according to suggested manufacturer's recommendations or other best practices.
D. Monitoring Frequency	Measured continuously and recorded daily.	Weekly

	Indicator No. 1	Indicator No. 2
Data Collection Procedure	Daily readings will be performed and documented by the observer.	Weekly inspections will be performed and documented by the observer. Any required maintenance will be logged.
Averaging period	Instantaneous	NA

#### JUSTIFICATION

#### I. Background

The pollutant-specific emission unit is the Polyethylene (PE) Foam Process, which consists of three (3) lines with VOC emissions controlled by a 5.4 MMBTU/hr Natural Gas-Fired Thermal Oxidizer. Previous stack testing has demonstrated an 87% VOC removal efficiency when the oxidizer is operated at 1250°F. Pregis has been able to meet the VOC limit by operating the oxidizer at 1250°F, using 87% VOC removal efficiency, as dictated by the current TVOP.

#### II. Rationale for Selection of Performance Indicators

The thermal oxidizer chamber temperature was selected because it is indicative of the proper VOC destruction within the chamber, as demonstrated by prior stack tests. If the chamber temperature decreases significantly, the proper VOC destruction efficiency may not be achieved.

The thermal oxidizer will be inspected on a weekly basis to ensure that the equipment is operated properly in accordance with suggested manufacturer's recommendations. Weekly inspections will be documented on weekly inspection logs.

#### III. Rationale for Selecting Indicator Ranges

A thermal oxidizer's efficiency, such as the basic one Pregis has, is based on residence time and mixing of gases in the combustion chamber and the temperature of the combustion chamber. Residence time and mixing is dictated by design which is already predetermined. Therefore, Pregis must control the temperature of the combustion chamber to ensure adequate temperature for combustion of the VOCs. The VOC of concern is isobutane, which has an autoignition temperature of about 860°F. The selected indicators are a combustion chamber temperature of 1250 °F or greater and weekly equipment inspections. When an

excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported as required by the Title V Permit Condition 5.A.5.

Weekly inspections will ensure proper maintenance of the control equipment ensures that it is working properly in accordance with suggested manufacturer's recommendations or other best practices.