# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

# TO OPERATE AIR EMISSIONS EQUIPMENT

## THIS CERTIFIES THAT

SABIC Innovative Plastics US LLC 3531 Port and Harbor Drive Port Bienville Industrial Park Bay St. Louis, Mississippi Hancock 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.

Permit Issued: \_\_\_\_\_ December 1, 2020

Effective Date: As specified herein.

### MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: November 30, 2025

2185 PER20190001

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### 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

- 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.

(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 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

Emission Point	SABIC Reference No.	Description
Fuel Burning	g Equipment	
AB-001	01-029	Line 1, 2, and 3 natural gas-fired hot oil heater with a capacity of 8.4 MMBtu/hr
AB-004	01-043	1,000 HP (2.54 MMBtu/hr; 745.7 kW) diesel-fired, emergency generator for Lines 1 and 2 (constructed in 1998)
AB-005	01-033	420 HP (1.07 MMBtu/hr; 313.2 kW) diesel-fired, emergency fire water pump (constructed in 1981)
AB-006	01-052 01-053	Two (2) 420 HP (1.07 MMBtu/hr; 313.2 kW) diesel-fired, emergency fire water pumps, PPE East Side and PPE West Side (constructed in 1986)
AB-007	01-037	260 HP (0.66 MMBtu/hr; 194 kW) diesel-fired, emergency cooling tower pump (constructed in 1990)
AB-010	01-073	20 MMBtu/hr natural gas-fired hot oil heater for Lines 4 and 5. The oligomer stream may be burned in this unit.
AB-012	01-078	35 HP (0.09 MMBtu/hr; 26 kW) diesel-fired, peroxide emergency generator (constructed in 2004)
AB-013	01-080	230 HP (0.59 MMBtu/hr; 150 kW) natural gas-fired, non-emergency stationary spark ignition internal combustion engine (manufactured/constructed in 2012)
AF-001	01-001	5.5 MMBtu/hr natural gas-fired incinerator used to control emissions from all or any of Lines 1,2,3,4, and 5 plus the following equipment: Pilot Plant Reactor, Wastewater Storage, Monomer Purge Storage Tank, Ethylbenzene Storage, NOM Storage, NDDM Storage, AMS Dimer Storage, Oligomer Storage.
AF-002	01-018	4.0 MMBtu/hr natural gas-fired incinerator used to control emissions from all or any of Lines 1,2,3,4, and 5 plus the following equipment: Pilot Plant Reactor, Wastewater Storage, Monomer Purge Storage Tank, Ethylbenzene Storage, NOM Storage, NDDM Storage, AMS Dimer Storage, Oligomer Storage.
AF-003	01-008	510 MMBtu/hr natural gas-fired flare used to control emissions from all or any of Lines 1,2,3,4, and 5 plus the following equipment: Pilot Plant Reactor, Wastewater Storage, Fuel Oil Storage, Ethylbenzene Storage, NOM Storage, Oligomer Storage, MP Storage, SW Storage, and OW Storage.
AM-016	02-060	6.0 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO) used to control emissions from finishing lines BA, BB, and BD and the STAMAX Line which can manufacture Acrylonitrile-Butadiene-Styrene (ABS) polymer based products, Styrene- Acrylonitrile (SAN) polymer-based products, polycarbonate based products, and polypropylene based products.
Manufacturii	ng Processes/Proce	ess Lines
AC-001	-	Line 1 Reaction Section where raw materials are continuously fed to reactors to produce thermoplastics. Vapors from the process vent to any one, or two or more of the following:

Emission Point	SABIC Reference No.	Description			
		AF-001, AF-002, or AF-003.			
AC-002	-	Line 1 Recovery Section where polymer and unreacted monomer/diluent are separated. Vapors not condensed in the process are routed to any one or two or more of the following: AF-001, AF-002, or AF-003. Emissions not captured by the control equipment are vented through a process stack.			
AD-001	-	Line 2 Reaction Section where raw materials are continuously fed to reactors to produce thermoplastics. Vapors from the process vent to any one, or two or more of the following: AF-001, AF-002, or AF-003.			
AD-002	-	Line 2 Recovery Section where polymer and unreacted monomer/diluent are separated. Vapors not condensed in the process are routed to any one or two or more of the following: AF-001, AF-002, or AF-003. Emissions not captured by the control equipment are vented through a process stack.			
AD-004	01-016	Line 2 pellet vacuum blower equipped with a dust collector			
AD-005	01-013	Line 1 and 2 devolatilizers where emissions are collected and vented through a high efficiency air filter			
AE-001	-	Line 3 Reaction Section where raw materials are continuously fed to reactors to produce thermoplastics. Vapors from the process vent to any one, or two or more of the following: AF-001, AF-002, or AF-003.			
AE-002	-	Line 3 Recovery Section where polymer and unreacted monomer/diluent are separated. Vapors not condensed in the process are routed to any one or two or more of the following AF-001, AF-002, or AF-003.			
AH-001	01-019	Line 3 pellet dryer exhaust cyclone			
AH-002	01-023	Line 4 pellet surge hopper			
AH-003	01-024	Line 4 pellet dryer exhaust cyclone			
AH-004	01-028	Line 5 pellet surge hopper			
AH-005	01-031	Line 5 pellet dryer exhaust cyclone			
AH-006	01-026	Line 4 and 5 tint filter receiver equipped with a baghouse			
AH-007	01-059	Line 4 and 5 pelletizer deduster exhaust			
AH-008	01-044	RN SAN Silo dust collector			
AH-009	01-056	Chem-Ops overhead bin dust collector			
AI-001	-	Line 4 Reaction Section where raw materials are continuously fed to reactors to produce thermoplastics. Vapors from the process vent to any one, or two or more of the following: AF-001, AF-002, or AF-003.			
AI-002	-	Line 4 Recovery Section where polymer and unreacted monomer/diluent are separated. Vapors not condensed in the process are routed to any one or two or more of the following:			

Emission Point	SABIC Reference No.	Description			
		AF-001, AF-002, or AF-003.			
AJ-001	-	Line 5 Reaction Section where raw materials are continuously fed to reactors to produce thermoplastics. Vapors from the process vent to any one, or two or more of the following: AF-001, AF-002, or AF-003.			
AJ-002	-	Line 5 Recovery Section where polymer and unreacted monomer/diluent are separated. Vapors not condensed in the process are routed to any one or two or more of the following: AF-001, AF-002, or AF-003.			
AK-003	01-036	Line 4 and 5 thermal oil expansion tank			
AK-004	02-049	Line 1, 2, and 3 hot oil expansion tank used to provide heat for the polymerization process and miscellaneous utilities			
AK-005	02-064	Finishing hot oil expansion tank			
AK-006	02-039	House vacuum dust collector fan			
AK-007	02-061	Color lab exhaust			
AK-008	02-062	Physical testing lab exhaust			
AL-005	01-012	Rubber grinding conveying blower equipped with a dust collector			
AL-006	01-014	Line 1 pellet vacuum blower equipped with a dust collector			
AM-001a	02-001	PP silo #11 bin vent filter			
AM-001b	02-002 02-003	PP Silo #11 rotary valve East and West vent filters			
AM-002a	02-004	PP silo #12 bin vent filter			
AM-002b	02-005 02-006	PP Silo #12 rotary valve East and West vent filters			
AM-003a	02-007	PP silo #13 bin vent filter			
AM-003b	02-009	PP Silo #13 rotary valve East vent filter			
AM-004a	02-010	SAN silo #14 bin vent filter			
AM-004b	02-011	SAN Silo #14 rotary valve East vent filter			
AM-005	02-012	PC-1 unloading rotary valve vent filter			
AM-006	02-013	PC-2 unloading rotary valve vent filter			
AM-007a	02-014	PC silo #21 bin vent filter			
AM-007b	02-015	PC silo #21 feed rotary valve vent filter			

Emission Point	SABIC Reference No.	Description
AM-008a	02-016	PP storage silo #20 bin vent
AM-008b	02-017	PP feed rotary valve vent filter #20
AM-009a	02-018	PP storage silo #19 bin vent
AM-009b	02-019	PP feed rotary valve vent filter #19
AM-010a	02-020	PP storage silo #18 bin vent
AM-010b	02-021	PP feed rotary valve vent filter #18
AM-011	02-024	Central Dust Collector Blower
AM-012a	02-027	Talc silo #17 bin vent
AM-012b	02-026	Talc silo #17 filter receiver
AM-012c	02-028	Talc silo #17 rotary valve vent filter
AM-013a	02-033	Talc silo #16 filter receiver
AM-013b	02-034	Talc silo #16 bin vent
AM-013c	02-035	Rotary valve vent filter for Talc silo #16
AM-014a	02-029	Resin silo #15 filter receiver
AM-014b	02-030	Resin silo #15 bin vent filter
AM-014c	02-031	Resin silo #15 rotary valve West vent filter
AM-014d	02-032	Resin silo #15 rotary valve East vent filter
AM-015	02-037	Resin unloading blower
AM-017	02-065	F538 additive conveying system equipped with a dust collector
AM-018	02-066	Miscellaneous additives conveying system equipped with a dust collector
AM-020	02-025	Pigment dust collector
AM-021	02-038	Railcar loading dust collector fan
AM-022	02-040	Talc filter receiver, Line BD
AM-023	02-041	PP-1 filter receiver, Line BD
AM-024	02-042	Rework blower, Line BD
AM-025	02-043	PP-2 filter receiver, Line BD

Emission Point	SABIC Reference No.	Description
AM-026	02-044	SAN filter receiver, Line BD
AM-027	02-045	Talc filter receiver, Line BB
AM-028	02-046	SAN filter receiver, Line BB
AM-029	02-047	Rework blower, Line BB
AM-030	02-048	PP-2 filter receiver, Line BB
AM-031	02-049	PP-1 filter receiver, Line BB
AM-033	02-050	Talc filter receiver, Line BA
AM-034	02-051	SAN filter receiver, Line BA
AM-035	02-052	Rework blower, Line BA
AM-036	02-053	PP-2 filter receiver, Line BA
AM-037	02-054	PP-1 filter receiver, Line BA
AM-038	02-063	Truck unloading cyclone (Giraffe)
AM-039	02-068	Glass dust collector equipped with high efficiency air filter
AM-040	02-069	Talc truck unloading
AM-041	02-070	PP railcar unloading; STAMAX line
AM-042	01-077	Hi-Vac industrial vacuum system
AM-043	02-071	Homopolymer receiver
AM-044	02-072	Copolymer #1 receiver
AM-045	02-073	Copolyner #2 receiver
AM-046	02-074	BA surge bin
AM-047	02-075	CMB surge bin which vents to AM-048
AM-048	02-076	CMB-BA vacuum blower
AM-049	02-077	PP-3 supersack unloader vacuum blower
AM-050	02-078	PP-3 Line BB vacuum blower
AM-051	02-079	PP-4 Line BB vacuum blower
AM-052	02-080	PP-4 Line BB vacuum blower

Emission Point	SABIC Reference No.	Description		
AM-053	02-081	Line BE blower		
AM-054	-	SABIC Warehouse		
AO-004	01-069	East RN railcar unloading blower equipped with a dust collector		
Storage Vesse	ls			
AA-002	01-057	500-gallon gasoline storage tank near Maintenance		
AG-001	01-002	600,000-gallon acrylonitrile storage tank equipped with an internal floating roof		
AG-002	01-003	600,000-gallon styrene storage tank equipped with a condenser		
AG-003	01-004	230,000-gallon alpha methyl styrene storage tank equipped with a condenser		
AG-005	01-076	37,000-gallon methyl methacrylate storage tank equipped with a condenser		
AG-013	01-005	800,000-gallon styrene and acrylonitrile swing storage tank equipped with an internal floating roof		

### 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 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.)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
Facility- wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued April 4, 1997, and TVOP issued August 24, 2009	3.B.1	НАР	9.9 tpy (individual HAP) 24.9 tpy total HAP
	40 CFR 61, Subpart FF	3.B.2	Benzene	Applicability
	National Emission Standard for Benzene Waste Operations			
	40 CFR 61.340(a), 61.342(g), and 61.355(a)(5), Subpart FF			
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.3	PM (filterable)	$E = 4.1(p)^{0.67}$
AA-002	40 CFR 63, Subpart CCCCCC	3.B.4	НАР	Applicability
	NESHAP for Gasoline Dispensing Facilities			
	40 CFR 63.11110, 63.11111(a) and (b), and Table 3, Subpart CCCCCC			
AB-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the SMOP issued March 15, 2001, and modified June 4, 2002	3.B.5	Fuel restriction	Natural gas only
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.6	PM (filterable)	0.6 lbs/MMBtu
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.7	SO <sub>2</sub>	4.8 lbs/MMBtu
AB-010	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the TVOP issued August 24, 2009	3.B.8	Fuel restriction	Natural gas or oligomer only
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.9	PM (filterable)	$E = 0.8808 * I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(3).	3.B.7	SO <sub>2</sub>	2.4 lbs/MMBtu
AB-010	40 CFR 60, Subpart Dc	3.B.10	SO <sub>2</sub> PM	Applicability
	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units			
	40 CFR 60.40c, Subpart Dc			

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AB-004 AB-005 AB-006 AB-007 AB-012 AB-013	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.6	PM (filterable)	0.6 lbs/MMBtu
AB-004 AB-005 AB-006 AB-007 AB-012 AB-013	<ul> <li>40 CFR 63, Subpart ZZZZ</li> <li>NESHAP for Stationary Reciprocating Internal Combustion Engines</li> <li>40 CFR 63.6580, 63.6585(a) and (c), 63.6590(a)(1)(iii), (a)(2)(iii), and (c)(1), and 63.6605, Subpart ZZZZ</li> </ul>	3.B.11	НАР	Applicability
AB-004 AB-005 AB-006 AB-007 AB-012	40 CFR 63.6640(f)(1), (2), and (4), Subpart ZZZZ	3.B.12	НАР	Operating requirements
AB-013	40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines 40 CFR 60.4230(a)(4)(iii), Subpart JJJJ	3.B.13	NO <sub>x</sub> CO VOC	Applicability
AB-013	40 CFR 60.4233(e), 60.4234, 60.4243(b)(1), and Table 1, Subpart JJJJ	3.B.14	NO <sub>x</sub> CO VOC	1.0 g/HP-hr 2.0 g/HP-hr 0.7 g/HP-hr
	40 CFR 60.4243(e), Subpart JJJJ	3.B.15		Alternative fuel requirement
AD-005	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the TVOP issued August 24, 2009	3.B.16	Operating restriction	≤ 72 hrs/yr of process being in operation without HEAF unit being in service
AF-001 AF-002 AM-016	11 Miss. Admin. Code Pt. 2, R. 1.3.H(1).	3.B.17	PM (filterable)	0.2 g/dscf calculated to 12% CO <sub>2</sub>
AF-001 AF-002 AF-003 AM-016	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.B.18	SO <sub>2</sub>	≤ 500 ppmv
AF-001 AF-002 AF-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the TVOP issued August 24, 2009	3.B.19	VOC/HAP	Control device must be in operation any time emissions are vented to it
AF-001 AF-002	Permit to Construct issued November 14, 1995	3.B.20	NO <sub>x</sub>	21.99 lbs/hr and 78.31 tpy

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AF-003	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.9	PM (filterable)	$E = 0.8808 * I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). , as established in the SMOP issued March 15, 2001, and modified June 4, 2002	3.B.21	Operating requirement	Flame present at all times
AM-016	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the SMOP issued March 15, 2001, and modified June 4, 2002, and the TVOP issued August 24, 2009	3.B.22	VOC/HAP	≤ 48 hrs/yr venting without oxidizer in operation
AM-016	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the TVOP issued August 24, 2009, and modified June 10, 2013	3.B.23	Operating requirement	Production line/RTO operating requirements
AG-013	<ul> <li>40 CFR 60, Subpart Kb</li> <li>Standards of Performance for Volatile</li> <li>Organic Liquid Storage Vessels</li> <li>Constructed, Reconstructed, or Modified</li> <li>after July 23, 1984</li> <li>40 CFR 60.110b(a), Subpart Kb</li> </ul>	3.B.24	VOC	Applicability
AG-013	40 CFR 60.112b(a)(1), Subpart Kb	3.B.25		Install internal floating roof
AM-011	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the TVOP issued August 24, 2009	3.B.26	Operating restriction	Operate dust collector at all times emissions are being vented to it
AF-001 AF-002 AF-003 AM-016	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a), CAM	3.B.27	VOC/HAP	Applicability
AH-008 AH-009 AM-011 AM-020			РМ	

3.B.1 The permittee shall limit emissions of Hazardous Air Pollutants (HAP) from the facility to less than or equal to 9.9 tons per year for any individual HAP or less than or equal to 24.9 tons per year for total HAP

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued April 4, 1997, and Title V Operating Permit issued August 24, 2009)

3.B.2 The permittee is subject to and shall comply with the applicable requirements of the National Emission Standard for Benzene Waste Operations, 40 CFR 61, Subpart FF. The total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 tons/year); therefore, the facility is only required to comply with the applicable recordkeeping and reporting requirements in Sections 5.B and 5.C of this permit.

(Ref.: 40 CFR 61.340(a), 61.342(g), and 61.355(a)(5), Subpart FF)

3.B.3 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter (PM) in total quantities in excess of the amount determined by the relationship:

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

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour.

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

3.B.4 Emission Point AA-002 is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Dispensing Facilities, 40 CFR 63, Subpart CCCCCC, and the applicable requirements of the General Provisions, 40 CFR 63, Subpart A as noted in Table 3 of Subpart CCCCCC. This storage tank has a monthly throughput of less than 10,000 gallons; therefore, the permittee is only required to comply with the work practice standards in Condition 3.D.1 and the recordkeeping requirement in Condition 5.B.3.

(Ref.: 40 CFR 63.11110, 63.11111(a) and (b), and Table 3, Subpart CCCCCC)

3.B.5 For Emission Point AB-001, the permittee shall be limited to combusting natural gas only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Synthetic Minor Operating Permit issued March 15, 2001, and modified June 4, 2002)

3.B.6 For Emission Points AB-001, AB-004, AB-005, AB-006, AB-007, AB-012, and AB-013, 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.7 For Emission Point AB-001, 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.

For Emission Point AB-010, the maximum discharge of sulfur dioxide shall not exceed 2.4 pounds (measured as sulfur dioxide) per million BTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) and (3).)

3.B.8 For Emission Point AB-010, the permittee shall be limited to combusting either natural gas or oligomer, or a combination of the two.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued August 24, 2009)

3.B.9 For Emission Points AB-010 and AF-003, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship

 $E = 0.8808 * I^{-0.1667}$ 

Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

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

3.B.10 Emission Point AB-010 is subject to and shall comply with the applicable requirements of the Standards of Performance for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, and the applicable requirements of the General Provisions, 40 CFR 60, Subpart A. Since the unit is only allowed to burn natural gas or oligomer, there are no applicable emission standards.

(<u>Ref.: 40 CFR 60.40c, Subpart Dc</u>)

3.B.11 Emission Points AB-004, AB-005, AB-006, AB-007, AB-012, and AB-013 are subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ and the applicable General Provisions, 40 CFR 63, Subpart A.

For purposes of this subpart, Emission Points AB-004, AB-005, AB-006, AB-007, and AB-012 are considered existing, emergency, compression ignition (CI) stationary RICE located at an area source of HAP emissions.

Emission Point AB-0013 is considered a new, non-emergency, spark ignition (SI) stationary RICE located at an area source of HAP emissions. As such, the permittee shall comply with the requirements of Subpart ZZZZ by complying with the applicable requirements of

the Standards of Performance for Stationary SI Internal Combustion Engines, 40 CFR 60, Subpart JJJJ.

The engines shall be in compliance with the applicable requirements of Subpart ZZZZ at all times and the permittee shall operate and maintain the engines in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (c), 63.6590(a)(1)(iii), (a)(2)(iii), and (c)(1), and 63.6605, Subpart ZZZ)

- 3.B.12 For Emission Points AB-004, AB-005, AB-006, AB-007, and AB-012, the engines shall be considered emergency stationary RICE under Subpart ZZZZ provided the engines only operate in an emergency, during maintenance and testing, and during non-emergency situations for 50 hours per year as described in (c) below. If the permittee does not operate an engine according to the requirements in (a)-(c) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.
  - (a) There is no limit on the use of an engine during an emergency situation.
  - (b) The permittee may operate an engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with an engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating the federal, state, or local standards require maintenance testing of an engine beyond 100 hours per calendar year.
  - (c) Emergency engines may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b). Except as provided in 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or nonemergency demand response, or to generate income for a facility to an electric grid or otherwise supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6640(f)(1), (2), and (4), Subpart ZZZZ)

3.B.13 Emission Point AB-013 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ and the applicable provisions of the General Provisions, 40 CFR 60, Subpart A.

(Ref.: 40 CFR 60.4230(a)(4)(iii), Subpart JJJJ)

- 3.B.14 For Emission Point AB-013, the permittee shall operate and maintain the engine such that it achieves the following emission standards for the life of the engine:
  - (a) Nitrogen oxides  $(NO_x) \le 1.0$  g/HP-hr
  - (b) Carbon monoxide (CO)  $\leq 2.0$  g/HP-hr
  - (c) Volatile organic compounds (VOC)  $\leq 0.7$  g/HP-hr

(Ref.: 40 CFR 60.4233(e), 60.4234, 60.4243(b)(1), and Table 1, Subpart JJJJ)

3.B.15 For Emission Point AB-013, the permittee may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards in 40 CFR 60.4233.

(<u>Ref.: 40 CFR 60.4243(e)</u>, <u>Subpart JJJJ</u>)

3.B.16 For Emission Point AD-005, the permittee shall not operate the process equipment more than 72 hours per year without the high efficiency air filter (HEAF) being in service.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued August 24, 2009)

3.B.17 For Emission Points AF-001, AF-002, and AM-016, the maximum discharge of particulate matter from each incinerator, unless otherwise specified or limited herein, shall not exceed 0.2 grains per standard dry cubic foot of flue gas calculated to twelve percent (12%) carbon dioxide by volume for products of combustion. This limitation shall apply when the incinerators are operating at design capacity.

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

3.B.18 For Emission Points AF-001, AF-002, AF-003, and AM-016, the permittee shall not cause or permit the emission of gas containing sulfur oxides (measured as sulfur dioxide) in excess of 500 ppm (volume) for any process equipment constructed after January 25, 1972.

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

3.B.19 For Emission Points AF-001, AF-002, and AF-003, the permittee shall operate each unit at all times when emissions are being vented to the unit. Waste gases from all five process lines can be vented to any unit individually, or to any combination of two or more of the three units. If an incinerator is receiving waste gases and shuts down for any reason, the waste gases shall be routed to one of the other operating units.

(<u>Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).</u>, as established in the Title V Operating Permit issued August 24, 2009)

3.B.20 For Emission Points AF-001 and AF-002, the maximum discharge of nitrogen oxides (NO<sub>x</sub>) from the incinerators (combined), shall not exceed 21.99 pounds per hour and 78.31 tons per year.

(Ref.: Permit to Construct issued November 14, 1995)

3.B.21 For Emission Point AF-003, the flare shall be operated with a flame present at all times that emissions are being vented to it.

(<u>Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).</u>, as established in the Synthetic Minor Operating Permit issued March 15, 2001, and modified June 4, 2002)

3.B.22 For Emission Point AM-016, the permittee shall not operate process equipment more than 48 hours per year without the thermal oxidizer in service while manufacturing ABS polymer-based products or polycarbonate-based products.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Synthetic Minor Operating Permit issued March 15, 2001, and modified June 4, 2002 and Title V Operating Permit issued August 24, 2009)

3.B.23 For Emission Point AM-016, the permittee may operate the STAMAX production line and the four (4) finishing extrusion lines (Lines BA, BB, BD, and BE) without firing the RTO when manufacturing only polypropylene or SAN-based products.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued August 24, 2009, and modified June 10, 2013)

3.B.24 Emission Point AG-013 (when storing acrylonitrile) is subject to the applicable requirements of the Standards of Performance for Volatile Organic Liquid Storage Vessels Constructed, Reconstructed, or Modified after July 23, 1984, 40 CFR 60, Subpart Kb and the applicable General Provisions, 40 CFR 60, Subpart A.

#### (<u>Ref.: 40 CFR 60.110b(a)</u>, <u>Subpart Kb</u>)

3.B.25 For Emission Point AG-013 (while storing acrylonitrile), the permittee shall equip the

storage vessel with fixed roof in combination with an internal floating roof which meets the following specifications:

- (a) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- (b) The internal floating roof shall be equipped with a liquid-filled seal mounted between the wall of the storage vessel and the edge of the internal floating roof continuously around the circumference of the tank.
- (c) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- (d) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- (e) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- (f) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- (g) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- (h) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- (i) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

### (Ref.: 40 CFR 60.112b(a)(1), Subpart Kb)

3.B.26 For Emission Point AM-011, the permittee shall operate the central dust collector at all times that emissions are being vented to it.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued August 24, 2009)

3.B.27 For Emission Points AF-001, AF-002, AF-003, and AM-016 (VOC) and Emission Points AH-008, AH-009, AM-011, and AM-020 (PM), the permittee is subject to and shall comply with all applicable requirements of 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(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	РМ	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO <sub>2</sub>	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).)

D. <u>Work Practice Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-002	40 CFR 63.11116(a) and 63.11115(a), Subpart CCCCCC	3.D.1	HAP	General requirements
AB-004 AB-005	40 CFR 63.6603(a) and Table 2d, Subpart ZZZZ	3.D.2	HAP	Maintenance requirements
AB-005 AB-006 AB-007 AB-012	40 CFR 63.6625(e)(3) and (h), 63.6640(a), and Table 6, Subpart ZZZZ	3.D.3		Operating requirements

- 3.D.1 For Emission Point AA-002, the permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Such preventive measures shall include:
  - (a) Minimize gasoline spills;
  - (b) Clean up spills as expeditiously as practicable;
  - (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
  - (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

The permittee must, at all times, operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures, review of operation and maintenance procedures.

(Ref.: 40 CFR 63.11116(a) and 63.11115(a), Subpart CCCCCC)

- 3.D.2 For Emission Points AB-004, AB-005, AB-006, AB-007, and AB-012, the permittee shall comply with the following maintenance requirements:
  - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis at the same frequency in order to extend the oil change requirement in accordance with 40 CFR 63.6625(i).
  - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
  - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practices according to the schedule in (a)-(c) above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated.

### (Ref.: 40 CFR 63.6603(a) and Table 2d, Subpart ZZZZ)

3.D.3 For Emission Points AB-004, AB-005, AB-006, AB-007, and AB-012, the permittee shall

operate and maintain the engines according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(Ref.: 40 CFR 63.6625(e)(3) and (h), 63.6640(a), and Table 6, Subpart ZZZZ)

### 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. 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. <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. 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.

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

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).)

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).	5.B.1	НАР	Keep material usage records and calculate monthly and rolling 12- month total emissions
	40 CFR 61.356(a) and (b), Subpart FF	5.B.2	Benzene	Recordkeeping
AA-002	40 CFR 63.11111(e) and 63.11116(b), Subpart CCCCCC	5.B.3	HAP	Recordkeeping
AB-001 AB-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.4	Fuel	Monitor and keep records of monthly fuel usage
AB-010	40 CFR 60.48c(g)(2) and (i), Subpart Dc	5.B.5	Fuel	Monthly fuel usage records
AB-004 AB-005 AB-006 AB-007 AB-012	40 CFR 63.6625(f) and 63.6655(f)(2), Subpart ZZZZ	5.B.6	HAP	Install non-resettable hour meter and record hours of operation
	40 CFR 63.6655(a)(1), (2), and (5), and (e)(3), and 63.6660, Subpart ZZZZ	5.B.7		General recordkeeping
AB-013	40 CFR 60.4245(a)(1) through (3), Subpart JJJJ	5.B.8	NO <sub>x</sub> CO VOC	Recordkeeping requirements
	40 CFR 60.4243(e), Subpart JJJJ	5.B.9	Fuel	Fuel records for alternative fuel
AD-005	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.10	Operating requirement	Keep records of process and control equipment operations
AF-001 AF-002 AF-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.11	Operating requirement	Records of any operational periods where emissions are vented to control device when not operating
AF-001 AF-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.12	NOx	Performance testing
AM-016	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.13	Operating requirement/ temperature	Monitor periods where emissions are vented to control device when not operating/monitor and record temperatures
		5.B.14	Operating requirement	Monitor and record process operations
AG-013	40 CFR 60.116b(a) and (b), Subpart Kb	5.B.15	VOC	Recordkeeping

### B. <u>Specific Monitoring and Recordkeeping Requirements</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
AG-013	40 CFR 60.113b(a)(1), (2), and (4) and 60.115b(a)(2), Subpart Kb	5.B.16	VOC	Periodic visual inspections
	40 CFR 60.116b(c) and (d), Subpart Kb	5.B.17		Recordkeeping
AM-011	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.18	Operating requirement	Records of any operational periods where emissions are being vented to the dust collector when not operating.
AF-001 AM-016	40 CFR 64.3(a) and (b), 64.6(c), CAM	5.B.19	VOC	Continuously monitor temperature in combustion chamber
AF-002		5.B.20		Continuously monitor temperature in the stack gas
AF-003		5.B.21		Continuously monitor presence of pilot flame
AH-008 AH-009 AM-011 AM-020		5.B.22	РМ	Weekly visible observations
AF-001 AF-002 AF-003 AH-008 AH-009 AM-011 AM-016 AM-020	40 CFR 64.7(b) and (c), CAM	5.B.23	PM VOC/HAP	Operation and maintenance requirements for monitoring system(s)
	40 CFR 64.7(d), CAM	5.B.24		Corrective action response to an excursion/exceedance of a CAM indicator
	40 CFR 64.8, CAM	5.B.25		Upon request by DEQ, develop a Quality Improvement Plan (QIP)
	40 CFR 64.8, CAM	5.B.26		Maintain CAM records as specified

5.B.1 The permittee shall demonstrate compliance with the individual and total HAP limits using emission factors derived from the pounds of product extruded daily, concentrations, mass balance, control efficiencies determined via stack testing, or other approved method. The permittee shall calculate HAP emissions (individual and total) on a monthly basis to determine the rolling 12-month totals in tons per year.

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

5.B.2 The permittee shall maintain records that identify each waste stream at the facility subject to the provisions of 40 CFR 61, Subpart FF and indicate whether or not the waste stream is controlled for benzene emissions. These records shall also include all test results, measurements, calculations, and other documentation used to determine the following for the waste stream: waste stream identification, water content, whether or not the waste
stream is a process waste water stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity. Each record shall be kept in a readily accessible location at the facility for a period not less than two years from the date the information is recorded.

(Ref.: 40 CFR 61.356(a) and (b), Subpart FF)

5.B.3 For Emission Point AA-002, the permittee shall keep records to demonstrate that the monthly throughput of gasoline is less than the 10,000 gallon threshold level. The permittee is not required to submit any records or notifications but must be able to produce such records within 24 hours of a request by the DEQ.

(Ref.: 40 CFR 63.11111(e) and 63.11116(b), Subpart CCCCCC)

5.B.4 For Emission Points AB-001 and AB-010, the permittee shall keep records documenting the monthly fuel usage (type and quantity) for each hot oil heater.

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

5.B.5 For Emission Point AB-010, the permittee shall record and maintain records of the amount of fuel combusted each calendar month. These records shall be maintained for two (2) years following the date of such record.

(Ref.: 40 CFR 60.(Ref.: 40 CFR 60.48c(g)(2) and (i), Subpart Dc)

5.B.6 For AB-004, AB-005, AB-006, AB-007, and AB-012, the permittee shall install a nonresettable hour meter on each engine (if not already installed). The permittee shall keep records of the hours of operation of each engine that are recorded through the hour meters. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.

(Ref.: 40 CFR 63.6625(f) and 63.6655(f)(2), Subpart ZZZZ)

- 5.B.7 For AB-004, AB-005, AB-006, AB-007, and AB-012, the permittee shall keep the following records:
  - (a) A copy of each notification and report submitted to comply with Subpart ZZZZ.
  - (b) Records of the occurrence and duration of each malfunction of an engine or hour meter.
  - (c) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore a malfunctioning engine or hour meter to its normal manner of operation.
  - (d) Records of the maintenance conducted on each engine in order to demonstrate the

engines were operated and maintained in accordance to the maintenance plan.

All records shall be in a form suitable and ready for expeditious review for a period of five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. These records may be kept in an electronic or hard copy format.

(Ref.: 40 CFR 63.6655(a)(1), (2), and (5) and (e)(3) and 63.6660, Subpart ZZZZ)

- 5.B.8 For Emission Point AB-013, the permittee shall keep the following records:
  - (a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.
  - (b) Maintenance conducted on the engine.
  - (c) Documentation form the manufacturer that the engine is certified to meet the emission standards.

#### (Ref.: 40 CFR 60.4245(a)(1) through (3), Subpart JJJJ)

5.B.9 For Emission Point AB-013, if the permittee burns propane during an emergency, the permittee shall keep records identifying the number of hours the engine was fired using propane. If the engine is not certified to the emission standards when using propane and propane is used for more than 100 hours per year in an emergency situation, the permittee is required to conduct a performance test to demonstrate compliance with the applicable emission standards.

#### (Ref.: 40 CFR 60.4243(e), Subpart JJJJ)

5.B.10 For Emission Point AD-005, the permittee shall keep records documenting the number of hours per year the process operates without the HEAF being used to control emissions.

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

5.B.11 For Emission Points AF-001, AF-002, and AF-003, the permittee shall monitor and record any time emissions were being vented to one of the control devices that was not in operation. For any such event, the permittee shall also monitor and record each incinerator shutdown or malfunction and include a description of each incident, including duration, cause, and corrective action.

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

5.B.12 For Emission Points AF-001 and AF-002, the permittee shall stack test each unit in accordance with EPA Reference Method 7 to demonstrate compliance with the permitted emission limitations for NO<sub>x</sub>. A stack test on each unit shall be completed once every five years or within 61 months of the previous test(s). Each unit shall be operated at maximum

capacity during the stack test(s).

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

5.B.13 For Emission Point AM-016, the permittee shall monitor and record the total time the incinerator was not in operation while emissions were being vented to it and while manufacturing ABS polymer-based products, SAN-based products, or polycarbonate-based products. When the incinerator is operating and waste gas from the manufacturing of the products mentioned above are being vented to it, the permittee shall continuously monitor and record the combustion chamber temperature.

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

5.B.14 For Emission Point AM-016, the permittee shall keep records of the type of product (i.e., products based on either ABS polymer, SAN polymer, polycarbonate, or polypropylene) being produced on Lines BA, BB, BD, BE, or the STAMAX Line. These records shall include the start and end dates for each product and the time each line was in operation.

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

5.B.15 For Emission Point AG-013, the permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

(Ref.: 40 CFR 60.116b(a) and (b), Subpart Kb)

- 5.B.16 For Emission Point AG-013 (while storing acrylonitrile), the permittee shall complete the following inspections:
  - (a) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with a volatile organic liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.
  - (b) Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after the initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during the inspection required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the DEQ in the inspection report required in Condition 5.C.10. Such a request must document that alternate

storage capacity is unavailable and specify a schedule of actions the permittee will take to assure the control equipment will be repaired or the vessel will be emptied as soon as possible.

(c) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of these conditions exist before refilling the storage vessel with a VOL. These inspections shall be conducted at an interval not to exceed ten (10) years.

The permittee shall keep a record of each inspection performed as required in (a) through (c). Each record shall identify the storage vessel, the date the vessel was inspected, and the observed condition of each component of the control equipment (i.e., seals, fittings, internal floating roof).

### (Ref.: 40 CFR 60.113b(a)(1), (2), and (4) and 60.115b(a)(2), Subpart Kb)

5.B.17 For Emission Point AG-013 (while storing acrylonitrile), the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period. The permittee shall notify the DEQ within 30 days any time the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range as determined in 40 CFR 60.116b(e)(3).

### (Ref.: 40 CFR 60.116b(c) and (d), Subpart Kb)

5.B.18 For Emission Point AM-011, the permittee shall keep records detailing any periods where emissions were being vented to the dust collector while it was not in operation. These records shall include duration and reason for such operation.

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

5.B.19 For Emission Points AF-001 and AM-016, the permittee shall monitor the temperature in the combustion chamber in accordance with the CAM Plan found in Appendix C of the permit.

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

5.B.20 For Emission Point AF-002, the permittee shall monitor the temperature in the stack gas in accordance with the CAM Plan found in Appendix C of the permit.

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

5.B.21 For Emission Point AF-003, the permittee shall monitor the presence of a flame in accordance with the CAM Plan found in Appendix C of the permit.

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

5.B.22 For Emission Points AH-008, AH-009, AM-011, and AM-020, the permittee shall monitor visible emissions from each dust collector in accordance with the CAM Plan found in Appendix C of the permit.

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

- 5.B.23 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, 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), Compliance Assurance Monitoring)

5.B.24 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, 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), Compliance Assurance Monitoring)

5.B.25 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, based on the results of a determination made under Condition 5.B.24, 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). 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, Compliance Assurance Monitoring)

5.B.26 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.25 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)

# C. <u>Specific Reporting Requirements</u>

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)(1).	5.C.1	HAP	Semiannual report summarizing HAP emissions
	40 CFR 61.357(b), Subpart FF	5.C.2	Benzene	Report process changes that could cause an increase in benzene quantity
AB-001 AB-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(c)(1).	5.C.3	Fuel usage	Semiannual report
AB-004 AB-005 AB-006 AB-007 AB-012	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). and 40 CFR 63.6640(b), 63.6650(f), and Footnote 2 to Table 2d, Subpart ZZZZ	5.C.4	НАР	Report hours of operation and all deviations
AD-005	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	Operating hours	Semiannual report of operating hours with no control
AF-001 AF-002 AF-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.6	Operating hours	Semiannual report
AF-001 AF-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.7	NOx	Performance testing submittal requirements
AM-016	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.6	Operating hours	Semiannual report
		5.C.8	Production records	Semiannual report
AG-013	40 CFR 60.115b(a)(3), Subpart Kb	5.C.9	Tank defects	Submit report provided defects are identified during annual inspection
	40 CFR 60.113b(a)(5), Subpart Kb	5.C.10	Tank filling	Notification 30-days prior to refilling tank
AM-011	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	Operating hours	Semiannual report of operating hours
AF-001 AF-002	40 CFR 64.9(a), CAM	5.C.11	PM VOC/HAP	Semiannual reporting requirements
AF-002 AF-003 AH-008 AH-009 AM-011 AM-016 AM-020	40 CFR 64.7 (e), CAM	5.C.12	VOCHAF	Promptly notify DEQ of failure to achieve limit/standard though no excursion or exceedance was indicated by approved monitoring

5.C.1 The permittee shall submit a summary of the monthly and rolling 12-month total HAP emissions calculated during the reporting period in accordance with the semiannual reports required by Condition 5.A.4.

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

5.C.2 The permittee shall submit a report when there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to an amount equal to or more than 1 Mg/yr (1.1 ton/yr). The report shall be submitted in the semiannual reports required by Condition 5.A.4 that follows the reporting period in which the change occurred. The report shall include an update to all the information required to be kept per Condition 5.B.2.

### (Ref.: 40 CFR 61.357(b), Subpart FF)

5.C.3 For Emission Points AB-001 and AB-010, the permittee shall submit a summary in the semiannual reports required by Condition 5.A.4 of the fuels used during the reporting period. This summary shall include the type and quantity of fuel(s) burned in each unit.

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

5.C.4 For Emission Points AB-004, AB-005, AB-006, AB-007, and AB-012, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 summarizing the hours of operation of each engine in the calendar year. This report shall also include what hours were for emergency use and what constituted the emergency and what hours were for non-emergency use.

This report shall also include all deviations from any emission or operating limitation of Subpart ZZZZ. Such deviations shall include any failure to perform the work practice on the required schedule. In the event a work practice is delayed because the engine is operating during an emergency or if performing the work practice on the required work schedule posed an unacceptable risk under federal, state, or local law, the permittee shall include in the report the reason for the delay.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). and 40 CFR 63.6640(b), 63.6650(f), and Footnote 2 to Table 2d, Subpart ZZZZ)

5.C.5 For Emission Points AD-005 and AM-011, the permittee shall submit a summary of the hours of operation during the reporting period where emissions were vented to the control device at a time when the control device was not in operation. The summary shall be submitted in the semiannual reports required by Condition 5.A.4.

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

5.C.6 For Emission Points AF-001, AF-002, AF-003, and AM-016, the permittee shall submit in the semiannual reports required by Condition 5.A.4, a summary of the hours of operation during the reporting period where emissions were vented to the control device at a time when the control device was not in operation.

For each incinerator and RTO (AF-001, AF-002, and AM-016), the semiannual reports shall also include all shutdowns, malfunctions, or failures; exceedances and deviations from permit requirements; and total operating time. For each incinerator shutdown, malfunction, or failure, the report shall provide a description of each incident including incident duration, cause, and corrective action(s).

For the flare (AF-003), the semiannual reports shall include any information concerning periods where the pilot flame was not present, a summary of the periods when waste gas is being vented to it, including time and date venting begins, the time and date venting concludes, and the number of incinerators that were down during this venting period.

All exceedances and/or deviations shall be reported in accordance with Condition 5.A.5.

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

- 5.C.7 For Emission Points AF-001 and AF-002, the permittee shall submit the following notifications, information, and reports for each required performance test:
  - (a) For all required testing, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. If the test protocol contains variances from the EPA Reference Methods, the permittee shall submit a written test protocol at least ninety (90) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. After the first successful submittal of a written test 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.
  - (b) A notification of the scheduled test date(s) should be submitted ten (10) days prior to the scheduled date(s) so an observer may be afforded the opportunity to witness the test(s).
  - (c) The performance test results shall be submitted to the DEQ within sixty (60) days following completion of the performance test.

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

5.C.8 For Emission Point AM-016, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 that summarizes the types of products that were produced on Lines BA, BB, BD, or the STAMAX Line and how long each line operated during the reporting

period.

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

5.C.9 For Emission Point AG-013, if any of the conditions identified in Condition 5.B.16 are detected during the annual visual inspection, the permittee shall submit a report within 30 days of the inspection that identifies the storage vessel, the nature of the defects observed, and the date the storage vessel was emptied or the nature of and date the repair was made.

### (Ref.: 40 CFR 60.115b(a)(3), Subpart Kb)

5.C.10 For Emission Point AG-013, the permittee shall notify the DEQ in writing at least 30 days prior to the refilling of the storage vessel after an inspection required by Condition 5.B.16(c) to afford the DEQ the opportunity to have an observer present. If the inspection was not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the DEQ at least seven (7) days prior to the refilling of the storage vessel. Such notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned.

### (Ref.: 40 CFR 60.113b(a)(5), Subpart Kb)

- 5.C.11 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, 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.25. 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.12 For Emission Points AF-001, AF-002, AF-003, AH-008, AH-009, AM-011, AM-016, and AM-020, 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

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 <u>http://www.ecfr.gov/</u> 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;
  - (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

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and
	Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air
	Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air
11 Miss Admin Code Dt 2 Ch 6	Quality
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
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of
11 Wilss. Admin. Code I t. 2, Cli. 7.	the Federal Clean Air Act
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
lbs/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
NIMUOC	Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO <sub>x</sub> NSPS	Nitrogen Oxides
O&M	New Source Performance Standards, 40 CFR 60 Operation and Maintenance
PM	Particulate Matter
$PM_{10}$	Particulate Matter less than 10 $\mu$ m in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

# **APPENDIX B**

### List of Regulations Referenced In this Permit

11 Miss. Admin. Code, Part 2, Ch. 1. – Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended November 10, 2016)

11 Miss. Admin. Code, Part 2, Ch. 2. – Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code, Part 2, Ch. 6. – Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (Amended June 28, 2012)

40 CFR 82, Protection of Stratospheric Ozone

40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels Constructed, Reconstructed, or Modified after July 23, 1984

40 CFR 61, Subpart FF, National Emission Standard for Benzene Waste Operations

40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines

40 CFR 63, Subpart CCCCCC, NESHAP for Gasoline Dispensing Facilities

40 CFR 64, Compliance Assurance Monitoring

# **APPENDIX C**

### COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

2185 PER20190001

### 5.5 MMBtu/hr Incinerator (Emission Point AF-001) Used for Control of VOC/HAP

Monitoring Approach		
Indicator	Combustion chamber temperature	
Measurement Approach	When waste gas is being vented to the unit, the combustion chamber temperature will be monitored continuously using a thermocouple that monitors temperature. If the proper temperature is not maintained as measured by the thermocouple, the system will alarm so manual adjustment or shutdown can occur, as necessary.	
Indicator Range	Rolling 24-hour average temperature (calculated each hour) of the combustion chamber shall not fall below 1,554 °F, or the combustion chamber temperature determined during the most recent performance test.	
Performance Criteria		
Data Representativeness	The incinerator has been designed to achieve at least 99% thermal destruction of volatile organics. Operating the incinerator at or above the specified temperature ensures proper combustion of these gases.	
Verification of Operational Status	Records will be maintained onsite and available for inspection by DEQ personnel.	
QA/QC Practices	SABIC will follow the manufacturer's recommendations for quality assurance and control of the incinerator instrumentation.	
Monitoring Frequency	The thermocouple will monitor combustion chamber temperature continuously when waste gas is being vented to the unit.	
Data Collection Procedure	Thermocouple readings are collected electronically.	

### 4.0 MMBtu/hr Incinerator (Emission Point AF-002) Used for Control of VOC/HAP

Monitoring Approach		
Indicator	Stack gas temperature	
Measurement Approach	When waste gas is being vented to the unit, the stack gas temperature will be monitored continuously using a thermocouple that monitors temperature. If the proper temperature is not maintained as measured by the thermocouple, the system will alarm so manual adjustment or shutdown can occur, as necessary.	
Indicator Range	Rolling 24-hour average temperature (calculated each hour) of the stack gas shall not fall below 1,559 °F, or the stack gas temperature determined during the most recent performance test.	
Performance Criteria		
Data Representativeness	The incinerator has been designed to achieve at least 99% thermal destruction of volatile organics. Operating the incinerator at or above the specified temperature ensures proper combustion of these gases.	
Verification of Operational Status	Records will be maintained onsite and available for inspection by DEQ personnel.	
QA/QC Practices	SABIC will follow the manufacturer's recommendations for quality assurance and control of the incinerator instrumentation.	
Monitoring Frequency	The thermocouple will monitor stack gas temperature continuously when waste gas is being vented to the unit.	
Data Collection Procedure	Thermocouple readings are collected electronically.	

### Flare (Emission Point AF-003) Used for Control of VOC/HAP

Monitoring Approach		
Indicator	Presence and temperature of flame.	
Measurement Approach	When waste gas is being vented to the unit, the presence of a flame will be monitored continuously using a thermocouple that monitors flame temperature. If the presence of a flame is not detected by the thermocouple, the system will alarm so manual adjustment or shutdown can occur, as necessary.	
Indicator Range	The thermocouple activates an alarm if it detects less than $250$ °F. The alarm is deactivated when the thermocouple detects $250$ °F, indicating the presence of a flame.	
Performance Criteria		
Data Representativeness	The flare has been designed to achieve at least 99% thermal destruction of volatile organics. The presence of a flame and operating the flare within the specified temperature range ensures proper combustion of these gases.	
Verification of Operational Status	Records will be maintained onsite and available for inspection by DEQ personnel	
QA/QC Practices	SABIC will follow the manufacturer's recommendations for quality assurance and control of the flare instrumentation.	
Monitoring Frequency	The thermocouple will monitor the presence of a flame continuously when waste gas is being vented to the unit.	
Data Collection Procedure	Thermocouple readings are collected electronically	

# Regenerative Thermal Oxidizer (RTO) (Emission Point AM-016) Used for Control of VOC/HAP

Monitoring Approach		
Indicator	Combustion chamber temperature	
Measurement Approach	When waste gas is being vented to the unit, the combustion chamber temperature will be monitored continuously using a thermocouple that monitors temperature. If the proper temperature is not maintained as measured by the thermocouple, the system will alarm so manual adjustment or shutdown can occur, as necessary.	
Indicator Range	When controlling emissions from the manufacturing of ABS polymer-based products or polycarbonate-based products, the hourly average temperature of the combustion chamber shall not fall below 1,491 °F (or the minimum one-hour average combustion chamber temperature determined during the most recent performance test) more than one time each.	
Performance Criteria		
Data Representativeness	The thermal oxidizer has been designed to achieve at least 99% thermal destruction of volatile organics. Operating the thermal oxidizer at or above the specified temperature ensures proper combustion of these gases.	
Verification of Operational Status	Records will be maintained onsite and available for inspection by DEQ personnel.	
QA/QC Practices	SABIC will follow the manufacturer's recommendations for quality assurance and control of the thermal oxidizer instrumentation.	
Monitoring Frequency	The thermocouple will monitor combustion chamber temperature continuously when waste gas is being vented to the unit.	
Data Collection Procedure	Thermocouple readings are collected electronically.	

### RN SAN Silo Dust Collector (Emission Point AH-008) Chem-Ops Overhead Bin Dust Collector (Emission Point AH-009) Central Dust Collector (Emission Point AM-011) Pigment Dust Collector (Emission Point AM-020) Used for Control of PM/PM<sub>10</sub>

Monitoring Approach		
Indicator	Opacity	
Measurement Approach	Visible emissions from the baghouse exhaust will be monitored weekly using EPA Reference Method 22	
Indicator Range	Opacity 0-40%	
Performance Criteria		
Data Representativeness	DEQ has established a link between opacity and baghouse effectiveness. If visible emissions are observed during the weekly observation, SABIC will determine cause and take corrective actions.	
Verification of Operational Status	Records of weekly indicator ranges and weekly visible emissions observations, including excursions from the indicator ranges, will be maintained onsite and available for inspection by DEQ personnel.	
QA/QC Practices	SABIC will follow the manufacturer's recommendations for quality assurance and control of the baghouses.	
Monitoring Frequency	Opacity monitoring will occur once per week.	
Data Collection Procedure	The visible emissions observations are documented by the observer.	