STATE OF MISSISSIPPI **AIR POLLUTION CONTROL TITLE V PERMIT**

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Zeon Chemicals L P 1301 West 7th Street Hattiesburg, Mississippi Forrest 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: June 16, 2020

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krusstal Rudolph AUTHORIZED SIGNATURE **MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires: May 31, 2025

Permit No.: 0800-00006

TABLE OF CONTENTS

SECTION 1.	GENERAL CONDITIONS	3
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES	13
SECTION 3.	EMISSION LIMITATIONS & STANDARDS	16
SECTION 4.	COMPLIANCE SCHEDULE	31
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS	32
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS	73
SECTION 7.	TITLE VI REQUIREMENTS	74

APPENDIX ALIST OF ABBREVIATIONS USED IN THIS PERMITAPPENDIX BLIST OF REGULATIONS REFERENCED IN THIS PERMITAPPENDIX CLIST OF EMISSION UNITS WHICH VENT TO THE FLARE

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 DEVICE

Emission Point	Description				
	FUEL BURNING EQUIPMENT				
AA-007	47.2 MMBtu/hr natural gas-fired Cleaver Brooks No. 1 Boiler (Reference No. BOS-2001) equipped with an oxygen trim system				
AA-008	47.2 MMBtu/hr natural gas-fired Cleaver Brooks No. 2 Boiler (Reference No. BOS-2002) equipped with an oxygen trim system				
AA-009	265 HP (194 kW/1.97 MMBtu/hr) diesel-fired auxiliary fire pump engine (Clark UF-30 – manufactured in 2004)				
AA-010	201 HP (150 kW/1.49 MMBtu/hr) diesel-fired backup emergency generator (Cummins - manufactured in 2005)				
	RAILCAR UNLOADING				
AA-076	 Ethylene Oxide Railcar Unloading Scrubber Vent which includes emissions from the following equipment: a. 18,203 gallon Volatile Organic Compound Tank (pressure vessel) (Ref. No. T-19A) b. 18,203 gallon Volatile Organic Compound Tank (pressure vessel) (Ref. No. T-19B) c. 30,000 gallon Volatile Organic Compound Tank (pressure vessel) (Ref. No. T-1019) 				
	STORAGE VESSELS				
AT-009	6,462 gallon fixed roof Acetyl Acetone storage tank (Ref. No. T-10)				
AT-010	6,632 gallon fixed roof Tetrahydrofuran storage tank (Ref. No. T-12)				
AT-015	66,000 gallon fixed roof Epichlorohydrin (ECH) storage tank (Ref. No. T-18); includes emissions from the 675 gallon ECH Head Tank (Ref. No. T-32)				
AT-023	10,152 gallon fixed roof Allyl Glycidal Ether process tank (Ref. No. T-79)				
AT-027	8,530 gallon fixed roof Allyl Glycidal Ether storage tank (Ref. No. T-73)				
AT-031	2,080 gallon fixed roof Acetyl Acetone storage tank (Ref. No. T-1010)				
AT-040	17,093 gallon fixed roof Caustic storage tank (Ref. No. T-09)				
AT-041	15,704 gallon Ether storage tank (pressure vessel) (Ref. No. T-11). In the event of a process upset, emissions will be vented to the atmosphere or to the flare.				
AT-044	 66 gallon Kerosene storage tank (Ref. No. T-15), which includes emissions from the following equipment: a. 15,704 gallon Teal storage tank (pressure vessel) (Ref. No. T-13) b. 15,704 gallon Tibal storage tank (pressure vessel) (Ref. No. T-14) 				
AT-047	7,200 gallon Ether storage tank (pressure vessel) (Ref. No. T-41). In the event of a process upset, emissions will be vented to the atmosphere or to the flare.				
AT-049	5,501 gallon Caustic storage tank (Ref. No. T-110)				

The front-end process includes activity from raw material storage through the stripping operation, including pre-

Emission Point	Description
polymerization blend	ing, reactions, etc.
AA-001	2.5 MMBtu/hr John Zink Flare (Ref. No. 1A). Controls emissions from all equipment listed in Appendix C.
AA-062	655 gallon Toluene process tank (Ref. No. R-41)
AA-068	490 gallon Toluene process tank (Ref. No. T-29)
AA-069	400 gallon Toluene process tank (Ref. No. T-30)
AF-003	Solvation scrubber vent via Tank T-2097 (Ref. No. T-2097)
AF-004	 Molecular Sieve Volatile Organic Compound Dryer, which vents emissions through the Sieve condensate tank (Ref. No. T-2017). Includes emissions from the following equipment: a. Molecular sieve tank (Ref. No. A-2017) b. Volatile organic compound condenser (Ref. No. E-2017)
AT-011	1,114 gallon fixed roof Tetrahydrofuran process tank (Ref. No. T-46). Includes emissions from the 114 gallon volatile organic compound storage tank (Ref. No. T-46-5)
AT-012	10,380 gallon fixed roof Tetrahydrofuran process tank (Ref. No. T-47)
AT-013	66,000 gallon fixed roof Toluene process tank (Ref. No. T-16)
AT-014	66,000 gallon fixed roof Toluene process tank (Ref. No. T-17)
AT-017	25,200 gallon fixed roof Toluene process tank (Ref. No. T-25)
AT-018	10,152 gallon fixed roof Toluene process tank (Ref. No. T-74)
AT-019	10,000 gallon fixed roof Toluene and Tetrahydrofuran process tank (Ref. No. T-75)
AT-020	10,000 gallon fixed roof Toluene and Tetrahydrofuran process tank (Ref. No. T-76)
AT-021	10,400 gallon fixed roof Ether process tank (Ref. No. T-77)
AT-022	10,400 gallon fixed roof Toluene and Tetrahydrofuran process tank (Ref. No. T-78)
AT-024	20,000 gallon fixed roof Toluene process tank (Ref. No. T-80A)
AT-025	20,000 gallon fixed roof Toluene process tank (Ref. No. T-80B)
AT-026	66,000 gallon fixed roof Toluene process tank (Ref. No. T-1016)
AT-050	36,800 gallon fixed roof Toluene process tank (Ref. No. T-2016)
	BACK-END PROCESS OPERATIONS rations in an EPPU following the stripping operations. Back-end process operations include, but are not oagulation, blending, concentrating, drying, separating, and other finishing operations, as well as latex
AA-003	A-Line Tunnel Dryer (Ref. No. 1D)

Emission Point	Description				
AA-005	A-Line French Press/Shaker Screen (Ref. No. 1E2)				
AA-085	A-Line Process Cyclone used to convey rubber crumb from the French Press/Shaker Screen to the Tunnel Dryer (Ref. No. 1J)				
AB-004	B-Line Tunnel Dryer (Ref. No. 1C1)				
AB-006	B-Line French Press/Shaker Screen (Ref. No. 1E1)				
AB-032	B-Line Conveyor Dryer (Ref. No. 1C2)				
AB-033	B-Line Process Cyclone used to convey rubber crumb from the French Press/Shaker Screen to the Tunnel Dryer (Ref. No. 1K)				
	WASTEWATER OPERATIONS				
AM-042	Emissions from wastewater streams exiting the following process equipment:				
	a. Dryer buildingb. Solvent separatorc. Batch stilld. Coagulation systems				
	Includes maintenance wastewater (Ref. No. S-50)				
	CHEMISAT TM PROCESS				
AC-001	Chemisat TM Acetic Acid Scrubber (front-end process) (Ref. No. T-1114)				
AC-002	Chemisat TM Ozone Destructor (back-end process) (Ref. No. S-1170)				
	FUGITIVE EMISSIONS FROM EQUIPMENT LEAKS				
AF-001	Fugitive emissions associated with piping and equipment components from the Epichlorohydrin Elastomer Product Processing Unit				
AF-002	Fugitive emissions associated with piping and equipment components from the Chemisat TM Hydrogenated Nitrile Butadiene Latex Elastomer Product Processing Unit				

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.)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
Facility Wide	 40 CFR 63, Subpart U NESHAP Emissions: Group I Polymers and Resins 40 CFR 63.480(a)(2) and (4), Subpart U and 63.506(b) 	3.B.1	НАР	Applicability
AA-001	40 CFR 63.485(a), Subpart U and 40 CFR 63.113(a)(1), Subpart G	3.B.2		Control emissions using a flare
AA-062 AA-068 AA-069	40 CFR 63.485(a), Subpart U and 40 CFR 63.113(f), Subpart G	3.B.3		Maintain flow rate from Group 2 process vents to less than 0.005 m ³ /min
AF-003	40 CFR 63.487(g)(1) and 63.488(d), Subpart U	3.B.4		Limit uncontrolled emissions of organic HAP to less than 11,800 kg/yr
AF-004	40 CFR 63.482(b), Subpart U	3.B.5		Limit annual organic HAP emissions to less than 496 lb/yr
AT-011 AT-012 AT-013 AT-014 AT-016 AT-017 AT-018 AT-019 AT-020 AT-021 AT-022 AT-021 AT-022 AT-024 AT-025 AT-026 AT-050	40 CFR 63.485(a) Subpart U and 40 CFR 63.113(e), Subpart G	3.B.6		Maintain TRE index value greater than 4.0
AA-003 AA-005 AA-085 AB-004 AB-006 AB-032 AB-033	40 CFR 63.494(a)(4), Subpart U	3.B.7		≤ 0.0166 Mg organic HAP per Mg of epichlorohydrin elastomer produced
AM-042	40 CFR 63.501(a) and (b), Subpart U, 40 CFR 63.132(a)(3), Subpart G, and 40 CFR 63.105(a), Subpart F	3.B.8	НАР	Wastewater stream requirements
AC-001	40 CFR 63.487(g)(1) and 63.488(d), Subpart U	3.B.4	HAP	Limit uncontrolled emissions of organic HAP to less than 11,800 kg/yr

B. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AF-001	40 CFR 63.502(a), Subpart U and 40 CFR 63.160(a), Subpart H	3.B.9	НАР	Applicability to equipment leak requirements
	40 CFR 63.163(e), Subpart H	3.B.10		Equipment leak provisions for pumps in light liquid service
	40 CFR 63.165, Subpart H	3.B.11		Equipment leak provisions for pressure relief devices in gas/vapor service
	40 CFR 63.166, Subpart H	3.B.12		Equipment leak provisions for sampling connection systems
	40 CFR 63.167, Subpart H	3.B.13		Equipment leak provisions for open-ended valves or lines
	40 CFR 63.172(a), (d), (e), and (m), Subpart H	3.B.14		Equipment leak provisions for closed-vent systems and control devices
	40 CFR 63.173(d)(1) through (3), Subpart H	3.B.15		Equipment leak provisions for agitators in gas/vapor service and in light liquid service
AA-007 AA-008	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.16	PM (filterable only)	E = 0.8808*I ^{-0.1667}
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.17	SO_2	4.8 lbs/MMBTU
	Construction Permit issued May 22, 1990, and modified June 2, 2000	3.B.18	Fuel Restriction	Natural gas/propane only
	2000	3.B.19	NOx	4.56 lbs/hr and 19.97 tpy for each boiler
	40 CFR 60, Subpart Dc	3.B.20	SO ₂ PM	Applicability
	Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units			
	40 CFR 60.40c, Subpart Dc			
AA-007 AA-008	40 CFR Subpart DDDDD	3.B.21	НАР	Applicability
	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD			
	40 CFR 63.7480, 63.7485, 63.7490(a)(1) and (d), 63.7499(1), and 63.7500(a)(1) and (e), Subpart DDDDD			

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	40 CFR 63.7500(a)(3) and (f) and 63.7505(a), Subpart DDDDD	3.B.22		Operating requirement
AA-009 AA-010	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.23	PM (filterable only)	0.6 lbs/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	3.B.24	Fuel restriction	Diesel fuel only
	40 CFR 63, Subpart ZZZZ	3.B.25	HAP	Applicability
	NESHAP for Stationary Reciprocating Internal Combustion Engines			
	40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(1)(ii), and 63.6605 (a) and (b), Subpart ZZZZ			
	40 CFR 63.6640(f)(1) through (3), Subpart ZZZZ	3.B.26		Operating requirements
AA-001	11 Miss. Admin. Code Pt. 2, R. 1.4.B.(1).	3.B.27	SO ₂	≤ 500 ppm
	PSD Construction Permit issued	3.B.28	TOC	Reduce TOC emissions using a flare
	June 8, 2000, and modified November 8, 2012		Visible Emissions	No visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours
			Operating restriction	Flame shall be present at all times and flare shall be operated at all times emissions are vented to it
AF-004	Construction Permit issued May 22, 1990, and modified June 2,	3.B.29	VOC	4.5 lbs/hr and 1.65 tpy
	22, 1990, and modified Julie 2, 2000		Toluene	4.5 lbs/hr
AA-003	PSD Construction Permit issued June 8, 2000, and modified	3.B.30	VOC	22.22 lbs/hr
AA-005	November 8, 2012	3.B.31		16.95 lbs/hr
AA-085		3.B.32		12.95 lbs/hr
A-Line Back-End Process (includes AA-003 AA-005 AA-085)	PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	3.B.33	VOC	Total A-Line Back-End process emissions are limited to 228.24 tpy in any consecutive 12-month period
AA-003 AA-005	11 Miss. Admin. Code Pt. 2, R.	3.B.34	PM (filterable	$E = 4.1 p^{0.67}$

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-085 AB-004 AB-006 AB-032 AB-033	1.3.F.(1).		only)	

3.B.1 Process operations at the facility are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Group I Polymers and Resins, 40 CFR 63, Subpart U and the applicable recordkeeping and reporting requirements in Table 1 of the General Provisions, 40 CFR 63, Subpart A.

(Ref.: 40 CFR 63.480(a)(2) and (4), Subpart U and 63.506(b), Subpart A)

3.B.2 For Emission Point AA-001, the permittee shall reduce organic HAP emissions from the Group 1 process vents listed in Appendix C of this permit by routing all emissions to the flare. The flare shall be in compliance with the requirements of the General Provisions, 40 CFR 63.11(b), Subpart A. The permittee shall not vent any halogenated continuous front-end process vent streams to the flare.

Since the permittee has designated all the process vents listed in Appendix C as being Group 1 process vents, the permittee is not required to perform the group determination outlined in 40 CFR 63.115.

(Ref.: 40 CFR 63.485(a), Subpart U and 40 CFR 63.113(a)(1), Subpart G)

3.B.3 For Emission Points AA-062, AA-068, and AA-069, the permittee shall maintain a flow rate from the Group 2 process vents to less than 0.005 standard cubic meters per minute.

(Ref.: 40 CFR 63.485(a), Subpart U and 40 CFR 63.113(f), Subpart G)

3.B.4 Emission Points AF-003 and AC-001 are considered Group 2 batch front-end process vents with annual uncontrolled organic HAP emissions less than 11,800 kg/yr. The annual organic HAP emissions shall be determined at the exit of the batch unit operation.

(Ref.: 40 CFR 63.487(g)(1) and 63.488(d), Subpart U)

3.B.5 For Emission Point AF-004, the permittee shall limit annual organic HAP emission to less than 225 kg/yr (496 lbs/yr) to prevent the process vent from being considered a batch frontend process vent as defined in Subpart U.

(Ref.: 40 CFR 63.482(b), Subpart U)

3.B.6 For Emission Points AT-011, AT-012, AT-013, AT-014, AT-016, AT-017, AT-018, AT-019, AT-020, AT-021, AT-022, AT-024, AT-025, AT-026, and AT-050, the permittee shall maintain a Total Resource Effectiveness (TRE) index value greater than 4.0.

(Ref.: 40 CFR 63.485(a), Subpart U and 40 CFR 63.113(e), Subpart G)

3.B.7 For Emission Points AA-003, AA-005, AA-085, AB-004, AB-006, AB-032, and AB-033, the permittee shall limit organic HAP emissions from the production of epichlorohydrin elastomer to less than or equal to 0.0166 Mg organic HAP emissions per Mg of epichlorohydrin rubber produced. This emission limit was determined by dividing 51 Mg/yr by the mass of epichlorohydrin elastomer produced in 2009, in Mg.

(Ref.: 40 CFR 63.494(a)(4), Subpart U)

3.B.8 For Emission Point AM-042, the permittee shall comply with the applicable recordkeeping and reporting requirements for Group 2 wastewater streams per 40 CFR 63.132(a)(3), Subpart G and the maintenance wastewater requirements as specified in 40 CFR 63.105(a), Subpart F.

(Ref.: 40 CFR 63.501(a) and (b), Subpart U, 40 CFR 63.132(a)(3), Subpart G, and 40 CFR 63.105(a), Subpart F)

3.B.9 For Emission Point AF-001, the permittee shall comply with the equipment leak provisions of Subpart H that are applicable to the specific equipment identified in Subpart H.

(Ref.: 40 CFR 63.502(a), Subpart U and 40 CFR 63.160(a), Subpart H)

3.B.10 For Emission Point AF-001, the permittee shall ensure all pumps in light liquid service are equipped with a dual mechanical seal system that includes a barrier fluid system that meets the requirements for such a system per 40 CFR 63.163(e)(1) through (6).

(40 CFR 63.163(e), Subpart H)

- 3.B.11 For Emission Point AF-001, except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 ppm above background except as provided in (a) below, as measured by the method specified in 40 CFR 63.180(c).
 - (a) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background as soon as practicable, but no later than five (5) calendar days after each pressure release, except as provided in Condition 5.B.26.
 - (b) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the monitoring requirements.
 - (c) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the monitoring requirements provided the permittee installs a rupture disk upstream of the pressure relief device as soon as

practicable, but no later than (5) days after each pressure release, except as provided in Condition 5.B.26.

(<u>Ref.: 40 CFR 63.165, Subpart H</u>)

- 3.B.12 For Emission Point AF-001, the permittee shall ensure each sampling connection system shall:
 - (a) Be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured.
 - (b) Each closed-purge, closed-loop, or closed-vent system shall :
 - (1) Return the purged process fluid directly to the process line; or
 - (2) Collect and recycle the purged process fluid to a process; or
 - (3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of Condition 3.B.14; or
 - (4) Collect, store, and transport the purged process fluid to a system or facility identified in 40 CFR 63.166(b)(4)(i) through (iii).
 - (c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b).

(<u>Ref.: 40 CFR 63.166, Subpart H</u>)

- 3.B.13 For Emission Point AF-001, the permittee shall ensure each open-ended valve or line:
 - (a) Is equipped with a cap, blind flange, plug, or second valve, except as provided in paragraphs (d) and (e). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.
 - (b) If equipped with a second valve, the valve on the process fluid end shall be closed before the second valve is closed.
 - (c) If a double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
 - (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a) through (c).
 - (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in (a) through (c) are exempt from the requirements of paragraphs (a) through (c).

(<u>Ref.: 40 CFR 63.167, Subpart H</u>)

accordance with 40 CFR 63.11(b) to comply with the Subpart H requirements. The flare shall be continuously monitored to ensure it is being operated and maintained in accordance with the design specifications. The flare shall be in operation as designed at all times organic HAP emissions are being vented.

(<u>Ref.: 40 CFR 63.172(a), (d), (e) and (m), Subpart H</u>)

- 3.B.15 For Emission Point AF-001, the permittee shall equip each agitator in gas/vapor service and in light liquid service with a dual mechanical seal system that includes a barrier fluid system meeting the following requirements:
 - (a) Each dual mechanical seal system is:
 - (1) Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or
 - (2) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or control device in compliance with Condition 3.B.14.
 - (b) The barrier fluid is not in light liquid organic HAP service.
 - (c) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(Ref.: 40 CFR 63.173(d)(1) through (3), Subpart H)

3.B.16 For Emission Points AA-007 and AA-008, the permittee shall not have emissions of 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

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

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.17 For Emission Points AA-007 and AA-008, the maximum discharge of sulfur oxides from each fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.B.18 For Emission Points AA-007 and AA-008, the permittee shall burn only natural gas or propane.

(Ref.: Construction Permit issued May 22, 1990, and modified June 2, 2000)

3.B.19 For Emission Points AA-007 and AA-008, the nitrogen oxides emissions for each boiler are limited to less than or equal to 4.56 lbs/hr and 19.97 tpy determined on a rolling 12-month basis.

(Ref.: Construction Permit issued May 22, 1990, and modified June 2, 2000)

3.B.20 Emission Points AA-007 and AA-008 are subject to the requirements of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Since these boilers combust natural gas and propane only, there are no emission standards to meet.

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

3.B.21 Emission Points AA-007 and AA-008 are subject to and shall comply with all applicable requirements of the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD.

For purposes of Subpart DDDDD, Emission Points AA-007 and AA-008 are considered existing boilers that are in the "units designed to burn gas 1 fuels" category. The boilers are not subject to the emission limits in Table 2 or the operating limits in Table 4 of Subpart DDDDD.

(Ref.: 40 CFR 63.7480, 63.7485, 63.7490(a)(1) and (d), 63.7499(1), and 63.7500(a)(1) and (e), Subpart DDDDD)

3.B.22 For Emission Points AA-007 and AA-008, the permittee shall operate and maintain each unit in a manner consistent with safety and good air pollution control practices for minimizing emissions. The Subpart DDDDD work practice standards in Section 3.D of this permit apply at all times the boilers are operating, except during periods of startup and shutdown.

(Ref.: 40 CFR 63.7500(a)(3) and (f) and 63.7505(a), Subpart DDDDD)

3.B.23 For Emission Points AA-009 and AA-010, 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.24 For Emission Points AA-009 and AA-010, the permittee shall only combust diesel fuel in each engine.

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

3.B.25 Emission Points AA-009 and AA-010 are subject to and shall comply with the applicable requirements of the NESHAP for Stationary Internal Combustion Engines (RICE), 40 CFR

63, Subpart ZZZZ.

For purposes of this subpart, Emission Points AA-009 and AA-010 are considered existing, emergency, compression ignition (CI) stationary RICE at a major source of HAP emissions. These 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 does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(1)(ii), and 63.6605(a) and (b) Subpart ZZZZ)

- 3.B.26 For Emission Points AA-009 and AA-010, 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 MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating 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). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6640(f)(1) through (3), Subpart ZZZZ)

3.B.27 For Emission Point AA-001, the permittee shall not cause or permit the emission of gas

containing sulfur oxides (measured as sulfur dioxide) in excess of 500 ppm (volume) from any existing process equipment.

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

- 3.B.28 For Emission Point AA-001, the permittee shall reduce total organic compound (TOC) emissions from the emission units listed in Appendix C using a flare. The flare shall operate in accordance with the following:
 - (a) There shall be no visible emissions from the flare, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - (b) There shall be a flame present at all times when emissions are being vented to the flare.
 - (c) The flare shall be in compliance with 40 CFR 63.11(b) of Subpart A.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

3.B.29 For Emission Point AF-004, the permittee shall be limited to emitting no more than 4.5 lbs/hr and 1.65 tpy of VOCs, as determined on a rolling 12-month total. The permittee shall also be limited to emitting no more than 4.5 lbs/hr of toluene.

(Ref.: Construction Permit issued May 22, 1990, and modified June 2, 2000)

3.B.30 For Emission Point AA-003, the maximum hourly emission rate for VOC, shall not exceed 22.22 lbs/hr.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

3.B.31 For Emission Point AA-005, the maximum hourly emission rate for VOC, shall not exceed 16.95 lbs/hr.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

3.B.32 For Emission Point AA-085, the maximum hourly emission rate for VOC, shall not exceed 12.95 lbs/hr.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

3.B.33 The permittee shall limit the total combined VOC emissions from the A-Line Back-End Process to 228.24 tons/year in any consecutive 12-month period. The Back-End refers to the unit operations in an elastomer product process unit (EPPU) following the stripping operations. Back-End process operations include, but are not limited to, filtering, coagulation, blending, concentration, drying, separating, and other finishing operations, as well as latex and crumb storage. This includes VOC emissions from Emission Points AA-003, AA-005, and AA-085 and fugitive emissions from the A-Line process.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

3.B.34 For Emission Points AA-003, AA-005, AA-085, AB-004, AB-006, AB-032, and AB-033, the permittee shall not cause, permit, or allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship

 $E = 4.1p^{0.67}$

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

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

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 ₂	4.8 lbs/MMBTU

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

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

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-007 AA-008	40 CFR 63.7515(d), 63.7540(a)(12) and (13), and Table 3, Subpart DDDDD	3.D.1	НАР	Tune-up frequency
	40 CFR 63.7540(a)(10)(i)-(vi), Subpart DDDDD	3.D.2		Tune-up requirements
AA-009 AA-010	40 CFR 63.6602 and Table 2c, Subpart ZZZZ	3.D.3	HAP	Maintenance requirements
	40 CFR 63.6625(e) and (h), 63.6640(a), and Table 6, Subpart ZZZZ	3.D.4		Operating requirements

D. Work Practice Standards

3.D.1 For Emission Points AA-007 and AA-008, the permittee shall conduct a tune-up on each unit every five (5) years since each unit is equipped with a continuous oxygen trim system. Each subsequent tune-up must be completed no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled shutdown, but the burner must be inspected once every 72 months. For each unit with a continuous oxygen trim system, the permittee shall set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. If any unit is not operating on the required date for a tune-up, the permittee shall conduct the required tune-up within 30 calendar days of startup.

(Ref.: 40 CFR 63.7515(d), 63.7540(a)(12) and (13), and Table 3, Subpart DDDDD)

- 3.D.2 For Emission Points AA-007 and AA-008, each tune-up shall consist of the following:
 - (a) As applicable, inspect the burner, and clean or replace any components of the burner, as necessary (the burner inspection may be completed any time prior to the tune-up or can be delayed until the next scheduled unit shutdown).
 - (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (inspection may be delayed until the next scheduled unit shutdown).
 - (d) Optimize total emission of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject.
 - (e) Measure the concentrations from the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a

portable CO analyzer.

- (f) Maintain on-site and submit, if requested by MDEQ, a report containing the information in (1) and (2) below:
 - (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater.
 - (2) A description of any corrective actions taken as part of the tune-up.

(Ref.: 63.7540(a)(10)(i)-(vi), Subpart DDDDD)

- 3.D.3 For Emission Points AA-009 and AA-010, the permittee shall comply with the following 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 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 63.6602 and Table 2c, Subpart ZZZZ)

3.D.4 For Emission Points AA-009 and AA-010, the permittee shall operate and maintain the engines according to the manufacturer's emission-related written instructions or develop your own 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) 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).)

Page 34 of 75 Air Operating Permit No. 0800-00006

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
Facility Wide	40 CFR 63.506(a)(1), Subpart U	5.B.1	НАР	General recordkeeping
	40 CFR 63.506(b)(1)(i), Subpart U	5.B.2		Startup, shutdown, and malfunction recordkeeping
	40 CFR 63.506(d)(1)-(8), Subpart U	5.B.3		Keep records of continuous monitoring systems
AA-001	40 CFR 63.114(a)(2), Subpart G, 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2), and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.B.4	НАР	Continuously monitor presence of a pilot flame
	40 CFR 63.116(a), Subpart G, 40 CFR 63.11(b), Subpart A, 40 CFR 63.485(u) and 63.504(c), and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.B.5		Performance evaluations
	40 CFR 63.114(d), Subpart G	5.B.6		Monitor bypass lines
	40 CFR 63.117(a)(5), Subpart G	5.B.7		Recordkeeping requirements
	40 CFR 63.118(a), Subpart G	5.B.8		
AA-062 AA-068 AA-069	40 CFR 63.115(a), (b), and (e), Subpart G	5.B.9	НАР	Determination of process vent flow rate after a process change
AA-009	40 CFR 63.118(d), Subpart G	5.B.10		Recordkeeping
AC-001 AF-003	40 CFR 63.488(a)(2), (b), and (d), Subpart U	5.B.11	Organic HAP	Determine annual emissions of organic HAP
AC-001 AF-003	40 CFR 63.488(i), Subpart U	5.B.12	НАР	Determination of batch front-end process vents after a process change
	40 CFR 491(a)(1) through (3) and (d)(1), Subpart U	5.B.13		Recordkeeping
AF-004	11 Miss. Admin. Code Pt. 2, R.	5.B.14	Organic	Performance testing

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

Page 35 of 75 Air Operating Permit No. 0800-00006

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
	6.3.A(3)(a)(2).	5.B.15	НАР	Keep records of number of regenerations and calculate emissions of organic HAP
AT-011 through AT-014 AT-016 through AT-022 AT-024 through AT-026 AT-050	40 CFR 63.115(a), (d), and (e) Subpart G and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.B.16	НАР	Determine TRE index value after a process change
	40 CFR 63.117(b), Subpart G	5.B.17		Recordkeeping requirements
	40 CFR 63.118(c), Subpart G and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.B.18		
AA-003 AA-005 AA-085 AB-004 AB-006 AB-032 AB-033	40 CFR 63.495(g), Subpart U and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.B.19	НАР	Calculate and record organic HAP emissions from all back-end process operations
	40 CFR 63.498(a) and (e), Subpart U	5.B.20		Recordkeeping requirements
AM-042	40 CFR 63.147(b)(8), Subpart G	5.B.21	HAP	Recordkeeping requirements
	40 CFR 63.105, Subpart F	5.B.22		Maintenance wastewater requirements
AF-001	40 CFR 63.163(e), Subpart H	5.B.23	HAP	Monitoring of pumps in light liquid service
	40 CFR 63.165(b)(2) and 63.169(a), (b), and (c), Subpart H	5.B.24		Monitoring of pressure relief devices in liquid service
	40 CFR 63.168(b), (d), (e), (f), (h), and (i), Subpart H	5.B.25		Monitoring of valves
	40 CFR 63.171, Subpart H	5.B.26		Delay of repair
AF-001	40 CFR 63.172, Subpart H	5.B.27	HAP	Control device and closed-vent system requirements
	40 CFR 63.173(d)(4) through (6), Subpart H	5.B.28		Monitoring of agitators

Page 36 of 75 Air Operating Permit No. 0800-00006

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
	40 CFR 63.174, Subpart H	5.B.29		Monitoring of connectors
	40 CFR 63.181, Subpart H	5.B.30		Recordkeeping requirements
AA-007 AA-008	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). and	5.B.31	Fuel	Maintain records of monthly fuel usage
	40 CFR 60.48c(g)(2), Subpart Dc			
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.32	NO _x	Biennial performance testing
	40 CFR 63.7555(a)(1) and (2), Subpart DDDDD	5.B.33	НАР	Recordkeeping requirements
	40 CFR 63.7555(h), Subpart DDDDD	5.B.34		Alternative fuel records
	40 CFR 63.7560, Subpart DDDDD	5.B.35		Record retention requirements
AA-009 AA-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.36	Fuel	Maintain records of monthly fuel usage
	40 CFR 63.6625(f) and 63.6655(f)(1), Subpart ZZZZ	5.B.37	НАР	Install non-resettable hour meter and record hours of operation
	40 CFR 63.63.6655(a)(1), (2), (4), and (5), and (e)(2) and 63.6660, Subpart ZZZZ	5.B.38		General recordkeeping

- 5.B.1 The permittee shall maintain copies of all applicable records and reports required by Subpart U for a period of at least five (5) years according to (a) below with the exception in (b).
 - (a) All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent six (6) months of records shall be maintained on site or shall be accessible from a central location by computer or other means that provide access within two (2) hours after a request. The remaining four and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form.
 - (b) If the permittee submits copies of reports to the EPA Regional Office, the permittee is not required to maintain copies of reports. If the Regional Office has waived the requirement for submittal of copies of reports, the permittee is not required to maintain copies of those reports.

(<u>Ref.: 40 CFR 63.506(a)(1), Subpart U</u>)

5.B.2 The permittee shall comply with all applicable recordkeeping and reporting requirements in 40 CFR, Subpart A as specified in Table 1 of Subpart U. Such requirements include, but are not limited to, the requirements specified below:

The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment), air pollution control equipment, or monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.483(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep the following records associated with startups, shutdowns, or malfunctions:

- (a) Records of the occurrence and duration of each startup, shutdown, and malfunction of operation of process equipment, control devices or recovery devices, or continuous monitoring systems used to comply with Subpart U during which excess emissions (as defined in 40 CFR 63.480(j)(4)) occur.
- (b) For each startup, shutdown, or malfunction during which excess emissions (as defined in 40 CFR 63.480(j)(4)) occur, records reflecting whether the procedures specified in the affected source's startup, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if the plan includes procedures for routing a control device to a backup control device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist" or other form of recordkeeping that confirms conformance with the plan for the event.
- (c) The records in (a) and (b) above are not required if they pertain solely to Group 2 emission points that are not included in an emissions average.

(<u>Ref.: 40 CFR 63.506(b)(1)(i), Subpart U</u>)

- 5.B.3 The permittee shall keep the following records associated with the continuous monitoring systems used to comply with Subpart U:
 - (a) The continuous monitoring system shall measure data values at least once every 15 minutes.
 - (b) The permittee shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter block period) block average instead of all measured values. The permittee shall record each measured data value for batch front-end process vents.

- (c) The daily average (or batch cycle daily average) values of each continuously monitored parameter shall be calculated for each operating day as specified in (1) or (2) below, except as specified in paragraphs (d) or (e).
 - (1) The daily average value or batch cycle daily average shall be calculated as the average of all parameter values recorded during the operating day, except as specified in paragraph (e). For batch front-end process vents, as specified in 40 CFR 63.491(e)(2)(i), only parameter values measured during those batch emission episodes, or portions thereof, in the batch cycle that the permittee has chosen to control shall be used to calculate the average. The calculated average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.
 - (2) The operating day shall be the period that the owner or operator specifies in the operating permit or the Notification of Compliance Status for purposes of determining daily average values or batch cycle daily average values of monitored parameters.
- (d) If all recorded values for a monitored parameter during an operation day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the permittee may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average (or batch cycle daily average) for that operating day.
- (e) Monitoring data recorded during periods identified in (1) or (2) below shall not be included in any average computed under Subpart U. Records shall be kept of the times and durations of all such periods and any other periods during process or control device or recovery device operation when monitors are not operating.
 - (1) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; or
 - (2) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.
- (f) Records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(Ref.: 40 CFR 63.506(d)(1) through (8), Subpart U)

5.B.4 For Emission Point AA-001, the permittee shall continuously monitor the presence of a flare pilot flame using a device (including, but not limited to, a thermocouple, ultra-violet beam sensor, infrared sensor, or any other equivalent device) capable of continuously detecting the presence of a pilot flame. The monitoring equipment shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be

expected to monitor accurately.

The permittee shall keep records documenting the times and duration of any periods during which any process equipment associated with the flare, including the flare and any synthetic rubber continuous front-end process equipment which vents to the flare, are in operation while the pilot flame is absent from the flare or the monitor is not operating.

(Ref.: 40 CFR 63.114(a)(2), Subpart G, 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2), and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

- 5.B.5 For Emission Point AA-001, the permittee shall demonstrate initial compliance with the flare provisions of Subpart U by completing the following:
 - (a) Conduct a two hour visible emission test using Test Method 22 in Appendix A of 40 CFR 60.
 - (b) Determine the net heating value of the gas being combusted, using techniques specified in 40 CFR 63.11(b)(6).
 - (c) Determine the exit velocity using the techniques specified in either 40 CFR 63.11(b)(7)(i) (and 63.11(b)(7)(iii), where applicable) or 63.11(b)(8), as appropriate.

The permittee shall demonstrate continuous compliance with the flare provisions by conducting weekly visible emission evaluations using Test Method 22.

(Ref.: 40 CFR 63.116(a), Subpart G, 40 CFR 63.11(b), Subpart A, 40 CFR 63.485(u) and 63.504(c), Subpart U, and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

- 5.B.6 For Emission Point AA-001, the permittee shall comply with paragraphs (a) or (b) below for any bypass line between the origin of the gas stream (i.e., at an air oxidation reactor, distillation unit, or reactor as identified in 40 CFR 63.107(b)) and the point where the gas stream reaches the process vent, as described in 40 CFR 63.107, that could divert the gas stream directly to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph.
 - Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in Condition 5.B.8. The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere; or
 - (b) Secure the bypass line valve in the non-diverting position with a car-seal or a lockand-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

(Ref.: 40 CFR 63.114(d), Subpart G)

- 5.B.7 For Emission Point AA-001, the permittee shall keep records documenting the following:
 - (a) Flare design (i.e., steam-assisted, air-assisted, or non-assisted).
 - (b) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance demonstration required in Condition 5.B.5.
 - (c) All periods during the compliance demonstration when the pilot flame was absent.

(Ref.: 40 CFR 63.117(a)(5), Subpart G)

- 5.B.8 For Emission Point AA-001, the permittee shall keep the following records up-to-date and readily accessible:
 - (a) The hourly records and records of flare pilot flame outages as specified below:
 - (1) Hourly records of whether the monitor was continuously operating and whether the pilot flame was continuously present during each hour.
 - (2) Record the times and durations of all periods when all pilot flames are absent or the monitor is not operating.
 - (b) Hourly records of whether the flow indicator required in Condition 5.B.6 was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating.
 - (c) If a seal system is used to comply with Condition 5.B.6, hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.

(<u>Ref.: 40 CFR 63.118(a), Subpart G</u>)

5.B.9 For Emission Points AA-062, AA-068, and AA-069, the permittee shall recalculate the vent stream flow rate for each continuous front-end process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: process upsets, unintentional, temporary process changes, and changes that are within the range on which the original calculation was based.

The flow rate shall be recalculated based on measurements of vent stream flow rate as specified in 40 CFR 63.115 (b), or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in 40 CFR 63.115(d)(1).

For purposes of determining the vent stream flow rate, the sampling site shall be after the last recovery device (if present) but prior to the inlet of any control device and prior to release to the atmosphere. Method 1 or 1A of 40 CFR 60, Appendix A, as appropriate, shall be used for selection of the sampling site for vents greater than 0.10 meters in diameter, otherwise, no traverse selection method is needed.

(Ref.: 40 CFR 63.115(a), (b), and (e), Subpart G)

- 5.B.10 For Emission Points AA-062, AA-068, and AA-069, the permittee shall keep up-to-date, readily accessible records of :
 - (a) Any process changes as defined in 40 CFR 63.115(e)
 - (b) Any recalculation or measurement of the flow rate pursuant to 40 CFR 63.115(e).

(Ref.: 40 CFR 63.118(d), Subpart G)

5.B.11 For Emission Points AC-001 and AF-003, the permittee shall determine the group status of the batch front-end process vent by determining the annual average batch vent flow rate at the exit from the batch unit operation. For the purposes of this determination, the primary condenser operating as a reflux condenser on a reactor or distillation column, the primary condenser recovering monomer, reaction products, by-products, or solvent from a stripper operated in batch mode, and the primary condenser recovering monomer, reaction products, by-products, or solvent from a distillation operations operated in batch mode shall be considered part of the batch unit operation. All other devices that recover or oxidize organic HAP shall be considered control devices as defined in 40 CFR 63.482.

The permittee shall calculate annual uncontrolled TOC or organic HAP emission from the batch front-end process vent using the methods specified in 40 CFR 63.488(b)(1) through (8) to demonstrate that the batch front-end process vent is a Group 2 process vent.

(Ref.: 40 CFR 63.488(a)(2), (b), and (d), Subpart U)

- 5.B.12 For Emission Points AC-001 and AF-003, whenever process changes, as described in paragraph (a), are made that affect one or more Group 2 batch front-end process vents and that could reasonably be expected to change one or more Group 2 batch front-end process vents to Group 1 batch front-end process vents or that could reasonably be expected to reduce the batch mass input limitation for one or more Group 2 batch front-end process vents, the permittee shall comply with paragraphs (b) and (c) below.
 - (a) Examples of process changes include the changes listed in (1) through (3) below:
 - (1) For all batch front-end process vent, examples include but are not limited to, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of the batch unit operation as specified in 40 CFR 63.488(a)(2); or increases in production capacity or production rate. For purposes of this paragraph, process changes

do not include: Process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based.

- (2) For Group 2 batch front-end process vents where the group determination and batch mass input limitation are based on the expected mix of products, the situations described in paragraphs (A) and (B) shall be considered process changes.
 - (A) The production of combinations of products not considered in establishing the batch mass input limitation.
 - (B) The production of a recipe of a product with a total mass of HAP charged to the reactor during the production of a single batch of product that is higher than the total mass of HAP for the recipe used as the single highest-HAP recipe for that product in the batch mass input limitation determination.
- (3) For Group 2 batch front-end process vents where the group determination and batch mass input limitation are based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), the production of a recipe having a total mass of HAP charged to the reactor (during the production of a single batch of product) that is higher than the total mass of HAP for the highest-HAP recipe used in the batch mass input limitation determination shall be considered a process change.
- (b) For each batch front-end process vent affected by a process change, the permittee shall redetermine the group status by repeating the procedures specified in 40 CFR 63.488 (b) through (g), as applicable. Alternatively, engineering assessment, as described in 40 CFR 63.488(b)(6)(i), may be used to determine the effects of the process change.
- (c) Based on the results of paragraph (b), the permittee shall comply with either paragraph (1), (2), or (3) below.
 - (1) If the group redetermination described in paragraph (b) indicates that a Group 2 batch front-end process vent has become a Group 1 batch front-end process vent as a result of the process change, the permittee shall submit a report as specified in 40 CFR 63.492(b) and shall comply with the Group 1 provisions in 40 CFR 63.487 through 63.492 in accordance with 40 CFR 63.480(i)(2)(ii) or (i)(2)(iii), as applicable.
 - (2) If the redetermination described in paragraph (b) indicates that a Group 2 batch front-end process vent with annual emissions less than the applicable level specified in 40 CFR 63.488(d), and that is in compliance with 40 CFR 63.487(g), now has annual emissions greater than or equal to the applicable level specified by 40 CFR 63.488(d) but remains a Group 2 batch front-end process vent, the permittee shall comply with the provisions in paragraphs (A) through (C) below.

- (A) Redetermine the batch mass input limitation;
- (B) Submit a report as specified in 40 CFR 63.492(c); and
- (C) Comply with 40 CFR 63.487(f), beginning with the year following the submittal of the report submitted according to paragraph (B).
- (3) If the group redetermination described in paragraph (b) of this condition indicates no change in group status or no change in the relation of annual emissions to the levels specified in 40 CFR 63.488(d), the permittee shall comply with paragraphs (A) and (B) below.
 - (A) The owner or operator shall redetermine the batch mass input limitation; and
 - (B) The owner or operator shall submit the new batch mass input limitation in accordance with §63.492(c).

(<u>Ref.: 40 CFR 63.488(i), Subpart U</u>)

- 5.B.13 For Emission Points AC-001 and AF-003, the permittee shall maintain the following records:
 - (a) An identification of each unique product that has emissions from one or more batch emission episodes venting from the batch front-end process vent, along with an identification of the single highest-HAP recipe for each product and the mass of HAP fed to the reactor for that recipe.
 - (b) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle, as described in either paragraph (1) or (2), as appropriate.
 - (1) If the group determination is based on the expected mix of products, records shall include the emission estimates for the single highest-HAP recipe of each unique product identified in paragraph (a) that was considered in making the group determination under 40 CFR 63.488.
 - (2) If the group determination is based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), records shall include the emission estimates for the single highest-HAP recipe.
 - (c) Total annual uncontrolled TOC or organic HAP emissions, determined at the exit from the batch unit operation before any emission control, as determined in accordance with 40 CFR 63.488(b).

In addition to the records identified above, the permittee shall keep the following records readily accessible:

(d) Records designating the established batch mass input limitation required by 40 CFR 63.487(g)(1) and specified in 40 CFR 63.490(f).

(e) Records specifying the mass of HAP or material charged to the batch unit operation.

(<u>Ref.: 40 CFR 63.491(a), (b), and (d)(1), Subpart U</u>)

5.B.14 For Emission Point AF-004, the permittee shall conduct performance testing in accordance with EPA Reference Method 18 or 25A, 40 CFR 60, Appendix A to establish VOC and HAP (toluene) emission rates for each regeneration cycle. The performance test shall be completed once per permit term to establish emission rates that are to be used to estimate overall emissions and demonstrate compliance with the emission limits prescribed in Section 3.B. of this permit.

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 MDEQ. Also, MDEQ shall be notified in writing at least ten (10) days prior to the scheduled test(s) date so that an observer may be afforded the opportunity to witness the test(s).

The permittee may request that the resubmittal of the testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the protocol used during the initial test(s) can and will be followed.

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

5.B.15 For Emission Point AF-004, the permittee shall record the number of regenerations of the Molecular Sieve Toluene Dryer for each month and for each consecutive 12-month period in log form. The data will be used to estimate VOC and HAP (toluene) emissions and to demonstrate compliance with emission limits prescribed in Section 3.B.

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

- 5.B.16 For Emission Points AT-011 through AT-014, AT-016 through AT-022, AT-024 through AT-026, and AT-050, the permittee shall recalculate the TRE index value or vent stream flow rate for each continuous front-end process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based.
 - (a) The TRE index value, flow rate, or organic HAP concentration shall be recalculated based on measurements of vent stream flow rate, TOC, and organic HAP concentrations, and heating values as specified in 40 CFR 63.115 (a), (b), (c), and

(d), as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in 40 CFR 63.115(d)(1).

(b) Where the recalculated TRE index value is less than or equal to 1.0, or less than or equal to 4.0 but greater than 1.0, the recalculated flow rate is greater than or equal to 0.005 standard cubic meter per minute, or the recalculated concentration is greater than or equal to 50 parts per million by volume, the permittee shall submit a report as specified in 40 CFR 63.118 (g), (h), (i), or (j) and shall comply with the appropriate provisions in 40 CFR 63.113 by the dates specified in 40 CFR 63.100 of Subpart F.

For purposes of determining TRE index value or vent stream flow rate, the sampling site shall be after the last recovery device (if any recovery device is present) but prior to the inlet of any control device that is present and prior to release to the atmosphere. Method 1 or 1A of 40 CFR 60, Appendix A, as appropriate, shall be used for selection of the sampling site for vents greater than or equal to 0.10 meters in diameter, otherwise no traverse site selection method is needed.

(Ref.: 40 CFR 63.115(a), (d), and (e), Subpart G and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

5.B.17 For Emission Points AT-011 through AT-014, AT-016 through AT-022, AT-024 through AT-026, and AT-050, when the Group 2 continuous front-end process vent has a TRE index greater than 4.0, the permittee shall maintain records and measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments as specified in 40 CFR 63. 115(d)(1).

(<u>Ref.: 40 CFR 63.117(b), Subpart G</u>)

- 5.B.18 For Emission Points AT-011 through AT-014, AT-016 through AT-022, AT-024 through AT-026, and AT-050, the permittee shall keep up-to-date, readily accessible records of:
 - (a) Any process changes as defined in 40 CFR 63.115(e); and
 - (b) Any recalculation of the TRE index value pursuant to 40 CFR 63.115(e).

(Ref.: 40 CFR 63.118(c), Subpart G and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

- 5.B.19 For Emission Points AA-003, AA-005, AA-085, AB-004, AB-006, AB-032, and AB-033, the permittee shall determine compliance with the organic HAP emission limitation in Condition 3.B.7 in accordance with the following requirements:
 - (a) Calculate the organic HAP emission limitation in accordance with 40 CFR 63.494(a)(4)(i) through (iv), as applicable, record it, and submit it in accordance with 40 CFR 63.499(f)(1).
 - (b) Each month, calculate and record the organic HAP emissions from all back-end

process operations using engineering assessment. Engineering assessment includes, but is not limited to, the following:

- (1) Previous test results, provided the test was representative of current operating practices.
- (2) Bench-scale or pilot-scale test data obtained under conditions representative of current process operating conditions.
- (3) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:
 - (A) Use of material balances;
 - (B) Estimation of flow rate based on physical equipment design, such as pump or blower capacities;
 - (C) Estimation of organic HAP concentrations based on saturation conditions; and
 - (D) Estimation of organic HAP concentrations based on grab samples of the liquid or vapor.
- (c) Each month, record the type, grade, VOC content, and quantity of elastomer product(s) produced.
- (d) Each month, calculate and record the sums of the organic HAP emissions and the mass of elastomer produced for the previous calendar 12-month period.
- (e) Each month, divide the total mass of organic HAP emitted for the previous calendar 12-month period by the total mass of elastomer produced during this 12-month period. This value must be recorded in accordance with 40 CFR 63.498(e) and reported in accordance with 40 CFR 63.499(f)(2).

The permittee shall use the information above to demonstrate compliance with the short term VOC emission limits found in Section 3.B for Emission Points AA-003, AA-005, and AA-085 and to demonstrate compliance with the total combined VOC emission limit in tons per year for each consecutive 12-month period for the A-Line Back-End Process.

(Ref.: 40 CFR 63.495(g), Subpart U and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

- 5.B.20 For Emission Points AA-003, AA-005, AA-085, AB-004, AB-006, AB-032, and AB-033, the permittee shall maintain the records specified in (a) through (f).
 - (a) The type of elastomer product processed in the back-end operation.
 - (b) The type of process (solution process, emulsion process, etc.)
 - (c) The applicable organic HAP emission limitation determined in accordance with 40 CFR 63.494(a)(4)(i) through (iv).

- (d) The organic HAP emissions from all back-end process operations for each month, along with documentation of all calculations and other information used in the engineering assessment to estimate these emissions.
- (e) The mass of elastomer product produced each month.
- (f) The total mass of organic HAP emitted for each 12-month period divided by the total mass of elastomer produced during the 12-month period, determined in accordance with 40 CFR 63.495(g)(5).

(Ref.: 40 CFR 63.498(a) and (e), Subpart U)

- 5.B.21 For Emission Point AM-042, the permittee shall keep in a readily accessible location the records specified in (a) through (d) below.
 - (a) Process unit identification and description of the process unit.
 - (b) Stream identification code.
 - (c) For existing sources, concentration of Table 9 compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration.
 - (d) Flow rate in liter per minute.

(Ref.: 40 CFR 63.147(b)(8), Subpart G)

- 5.B.22 For Emission Point AM-042, if the maintenance wastewater contains organic HAPs listed in Table 9 of 40 CFR 63, Subpart G, the permittee shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The permittee shall modify or update the information as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the maintenance procedure. The descriptions shall:
 - (a) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
 - (b) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and
 - (c) Specify the procedures to be followed when clearing materials from process equipment.

(<u>Ref.: 40 CFR 63.105, Subpart F</u>)

- 5.B.23 For Emission Point AF-001, the permittee shall ensure all pumps in light liquid service are equipped with a dual mechanical seal system that includes a barrier fluid system.
 - (a) Each dual mechanical seal system shall be:

- (1) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
- (2) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or
- (3) Equipped with a closed-loop system that purges the barrier fluid into a process stream.
- (b) The barrier fluid shall not be in light liquid service.
- (c) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (d) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - If there are indications of liquids dripping from a pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid.
 - (2) If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.
- (e) Each sensor as described in paragraph (c) shall be observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.
- (f) The permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
- (g) If indications of liquids dripping from the pump seal exceed the criteria established in paragraph (f), or if, based on the criteria established in paragraph (f), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
- (h) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 5.B.26.

(Ref.: 40 CFR 63.163(e), Subpart H)

- 5.B.24 For Emission Point AF-001, the permittee shall ensure all pressure relief valves in liquid service comply with the following:
 - (a) Each pressure relief device in light liquid or heavy liquid service shall be monitored within five (5) calendar days by the method specified in 40 CFR 63.180(b) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in paragraph (c) below, it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b).

- (b) If an instrument reading 500 parts per million or greater is measured, a leak is detected.
- (c) When a leak is detected:
 - (1) The leak shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in Condition 5.B.26.
 - (2) The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
 - (3) For pressure relief devices that are not monitored by the method specified in 40 CFR 63.180(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

(Ref.: 40 CFR 63.165(b)(2) and 40 CFR 63.169 (a), (b), and (c), Subpart H)

- 5.B.25 For Emission Point AF-001, the permittee shall monitor all valves in either gas service or light liquid service according the following, except as provided in paragraphs (g) and (h) below, at the intervals specified in (c) below and comply with all other provisions of this condition, except as provided in 40 CFR 63.171, 63.177, 63.178, and 63.179.
 - (a) The valves shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).
 - (b) A leak is defined as an instrument reading of 500 parts per million or greater.
 - (c) The permittee shall monitor valve leaks at the intervals specified below:
 - (1) At process units with 2 percent or greater leaking valves, calculated according to paragraph (d), the permittee shall monitor each valve once per month.
 - (2) At process units with less than 2 percent leaking valves, the permittee shall monitor each valve once each quarter, except as provided in paragraphs (3) and (4).
 - (3) At process units with less than 1 percent leaking valves, the permittee may elect to monitor each valve once every 2 quarters.
 - (4) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.
 - (d) The permittee shall determine the percentage of leaking valves from the process as follows:
 - (1) The percent of leaking valves is calculated using the following equation:

$$%V_{\rm L} = (V_{\rm L}/(V_{\rm T} + V_{\rm C})) \times 100$$

where:

 $%V_{L}$ = Percent leaking valves as determined through periodic monitoring required in paragraphs (a) through (c).

 V_L = Number of valves found leaking excluding nonrepairables as provided in paragraph (d)(3)(A).

 V_{T} = Total valves monitored, in a monitoring period excluding valves monitored as required by (f)(3) of this section.

 V_c = Optional credit for removed valves = 0.67 × net number (i.e., total removed-total added) of valves in organic HAP service removed from process unit after the date set forth in 40 CFR 63.100(k) of Subpart F for existing process units. If credits are not taken, then V_c = 0.

- (2) For use in determining monitoring frequency, as specified in paragraph (c), the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.
- (3) Nonrepairable valves:
 - (A) Shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with paragraph (d)(3)(B). Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.
 - (B) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.
- (e) Leaks:
 - (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in Condition 5.B.26.
 - (2) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
 - (3) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.
 - (A) The monitoring shall be conducted as specified in 40 CFR 63.180 (b) and (c), as appropriate, to determine whether the valve has resumed leaking.

- (B) Periodic monitoring required by paragraphs (a) through (c) may be used to satisfy the requirements of paragraph (e)(3), if the timing of the monitoring period coincides with the time specified in paragraph (e)(3). Alternatively, other monitoring may be performed to satisfy the requirements of paragraph (e)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in paragraph (e)(3).
- (C) If a leak is detected by monitoring that is conducted pursuant to paragraph (e)(3), the permittee shall follow the provisions of paragraphs (e)(3)(C)(i) and (e)(3)(C)(ii), to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.168(e).
 - (i) If the permittee elected to use periodic monitoring required by paragraphs (a) through (c) to satisfy the requirements of paragraph (e)(3), then the valve shall be counted as a leaking valve.
 - (ii) If the permittee elected to use other monitoring, prior to the periodic monitoring required by paragraphs (a) through (c), to satisfy the requirements of paragraph (e)(3), then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.
- (f) First attempts at repair include, but are not limited to, the following practices where practicable:
 - (1) Tightening of bonnet bolts,
 - (2) Replacement of bonnet bolts,
 - (3) Tightening of packing gland nuts, and
 - (4) Injection of lubricant into lubricated packing.
- (g) Any valve that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-tomonitor valve is exempt from the requirements of paragraphs (a) through (e) of this section if:
 - (1) The permittee determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) through (c) of this section; and
 - (2) The permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.
- (h) Any valve that is designated, as described in 40 CFR 63.181(b)(7)(ii), as a difficultto-monitor valve is exempt from the requirements of paragraphs (a) through (c) of this section if:

- (1) The permittee determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at any time in a safe manner;
- (2) The process unit within which the valve is located is an existing source; and
- (3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

(Ref.: 40 CFR 63.168(b), (d), (e), (f), (h), and (i), Subpart H)

- 5.B.26 For Emission Point AF-001, the permittee shall comply with the following for all equipment for which leaks have been detected:
 - (a) Delay of repair of equipment for which leaks have been detected is allowed if repair within fifteen (15) days is technically infeasible without a process unit shutdown.
 Repair of this equipment shall occur by the end of the next process unit shutdown.
 - (b) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.
 - (c) Delay of repair for valves and connectors is also allowed if:
 - (1) The permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and
 - (2) When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172.
 - (d) Delay of repair for pumps is also allowed if equipped with a dual mechanical seal system that meets the requirements of Condition 5.B.23 and the repair is completed as soon as practicable, but not later than six (6) months after the leak was detected.
 - (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(Ref.: 40 CFR 63.171, Subpart H)

- 5.B.27 For Emission Point AF-001, the permittee shall comply with the following for closed-vent systems and control devices:
 - (a) Where a control device is used to comply with the provisions of Subpart H, the permittee shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.
 - (b) Except as provided in paragraphs (g) and (h), each closed-vent system shall be

inspected annually for visible, audible, or olfactory indications of leaks.

- (c) Each closed-vent system shall be inspected according to the procedures in 40 CFR 63.180(b).
- (d) Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in paragraph (e).
 - (1) A first attempt at repair shall be made no later than five (5) calendar days after the leak is detected.
 - (2) Repair shall be completed no later than fifteen (15) calendar days after the leak is detected, except as provided in paragraph (e).
- (e) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- (f) For each closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee shall comply with the provisions of either paragraph (1) or (2) below, except as provided in paragraph (3).
 - (1) Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every fifteen (15) minutes. Records shall be generated as specified in Condition 5.B,8. The flow indicator shall be installed at the entrance to any bypass line; or
 - (2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
 - (3) Equipment such as low leg drains, high point bleeds, analyzer vents, openended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph.
- (g) Any parts of the closed-vent system that are designated, as described in 40 CFR 63.181(b)(7)(i), as unsafe to inspect are exempt from the inspection requirements of paragraph (b) if:
 - (1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (b); and
 - (2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually.

- (h) Any parts of the closed-vent system that are designated, as described in 40 CFR 63.181 (b)(7)(i), as difficult to inspect are exempt from the inspection requirements of paragraphs (b) if:
 - (1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two (2) meters above a support surface; and
 - (2) The permittee has a written plan that requires inspection of the equipment at least once every five (5) years.
- (i) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of Subpart H, such system or control device shall be operating.

(Ref.: 40 CFR 63.172, Subpart H)

- 5.B.28 For Emission Point AF-001, each agitator shall be monitored in accordance with the following:
 - (a) The permittee shall visually inspect each agitator each calendar week for indications of liquids dripping from the agitator seal.
 - If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid.
 - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (b) Each sensor as described in Condition 3.B.15(c), is observed daily or is equipped with an alarm.
 - (c) The permittee shall determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. If indications of liquids dripping from the agitator seal exceed the established criteria, or if the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 5.B.26.

(Ref.: 40 CFR 63.173(d)(4) through (6), Subpart H)

- 5.B.29 For Emission Point AF-001, the permittee shall monitor all connectors in gas/vapor and light liquid service in accordance with the following:
 - (a) The connectors shall be monitored to detect leaks by the method specified in 40 CFR
 63.180(b). A leak is detected if an instrument reading greater than or equal to 500

ppm is measured.

- (b) The permittee shall monitor connectors for leaks at the frequencies specified in paragraphs (1) through (5) below.
 - (1) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period.
 - (2) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. A permittee may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.
 - (3) If the permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the permittee may monitor the connectors one time every 4 years. A permittee may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.
 - (4) If a process unit complying with the requirements of paragraph (b) of this section using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the permittee shall increase the monitoring frequency to one time every 2 years. A permittee may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The permittee may again elect to use the provisions of paragraph (b)(3) when the percent leaking connectors decreases to less than 0.5 percent.
 - (5) If a process unit complying with requirements of paragraph (b)(3) using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the permittee shall increase the monitoring frequency to one time per year. The permittee may again elect to use the provisions of paragraph (b)(3) when the percent leaking connectors decreases to less than 0.5 percent.
- (c) Connectors that have been opened or has otherwise had the seal broken shall:
 - (1) Except as provided in paragraph (c)(2), each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first three (3) months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d), unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of paragraph (h)(2).
 - (2) As an alternative to the requirements in paragraph (c)(1), the permittee may

choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the permittee may not count nonrepairable connectors for the purposes of paragraph (h)(2). The permittee shall calculate the percent leaking connectors for the monitoring periods described in paragraph (b), by setting the nonrepairable component, C_{AN} , in the equation in paragraph (h)(2) to zero for all monitoring periods.

- (3) A permittee may switch alternatives described in paragraphs (c)(1) and (2) at the end of the current monitoring period he is in, provided that it is reported as required in 40 CFR 63.182 and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch.
- (d) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in paragraph (f) of this section and in Condition 5.B.26. A first attempt at repair shall be made no later than five (5) calendar days after the leak is detected.
- (e) Any connector that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor connector is exempt from the requirements of paragraph (a) of this section if:
 - (1) The permittee determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraphs (a) through (d); and
 - (2) The permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.
- (f) Any connector that is designated, as described in 40 CFR 63.181(b)(7)(iii), as an unsafe-to-repair connector is exempt from the requirements of paragraphs (a) and (d) if:
 - (1) The permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (d); and
 - (2) The connector will be repaired before the end of the next scheduled process unit shutdown.
- (g) Inaccessible, ceramic, or ceramic-lined (e.g., porcelain, glass, or glass-lined) connectors are exempt from the monitoring requirements of paragraphs (a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182.
 - (1) An inaccessible connector is one that is:
 - (A) Buried;
 - (B) Insulated in a manner that prevents access to the connector by a monitor probe;
 - (C) Obstructed by equipment or piping that prevents access to the

connector by a monitor probe;

- (D) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;
- (E) Inaccessible because it would require elevating the monitoring personnel more than two (2) meters above a permanent support surface or would require the erection of scaffold; or
- (F) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.
- (2) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in Condition 5.B.26 and paragraph (f).
- (3) A first attempt at repair shall be made no later than five (5) calendar days after the leak is detected.
- (h) For use in determining the monitoring frequency, as specified in paragraph (b), the percent leaking connectors shall be calculated as specified in paragraphs (h)(1) and (h)(2).
 - (1) For the first monitoring period, use the following equation:

% $C_L = C_L/(C_t + C_C) \times 100$

where:

- % C_L= Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b).
- C_L = Number of connectors measured at 500 parts per million or greater, by the method specified in 40 CFR 63.180(b).
- Ct = Total number of monitored connectors in the process unit.
- $C_{C} = Optional credit for removed connectors = 0.67 \times net (i.e., total removed-total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then <math>C_{C} = 0$
- (2) For subsequent monitoring periods, use the following equation:

% $C_L = [(C_L - C_{AN})/(C_t + C_C)] \times 100$

where:

- % C_L = Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b).
 - C_L = Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in 40 CFR 63.180(b).
 - C_{AN} = Number of allowable nonrepairable connectors, as determined by monitoring required in paragraphs (b)(3) and (c) of this section, not to exceed 2 percent of the total connector population, C_t .
 - $C_t = Total number of monitored connectors, including nonrepairables, in the process unit.$
 - C_C = Optional credit for removed connectors = 0.67 × net (i.e., total removed-total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then $C_C = 0$
- (i) If a connector subject to monitoring under paragraph (b) is eliminated, the permittee may receive credit for elimination of the connector, as described in paragraph (h), provided the requirements in paragraphs (1) through (4) below are met.
 - (1) The connector was welded after the date of proposal of the specific subpart that references Subpart H.
 - (2) The integrity of the weld is demonstrated by monitoring it according to the procedures in 40 CFR 63.180(b) or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.
 - (3) Welds created after the date of proposal but before the date of promulgation of a specific subpart that references Subpart H are monitored or tested by three (3) months after the compliance date specified in the applicable subpart.
 - (4) Welds created after promulgation of the subpart that references Subpart H are monitored or tested within three (3) months after being welded.
 - (5) If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of Subpart H.

(<u>Ref.: 40 CFR 63.174, Subpart H</u>)

- 5.B.30 For Emission Point AF-001, the permittee shall maintain the following records:
 - (a) All records and required information shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the site or accessing the records from a central location by computer at the site.

- (b) Except as provided in paragraph (e) of this section, the following information pertaining to all equipment in each process unit subject to the requirements in 40 CFR 63.162 through 63.174 shall be recorded:
 - (1) For equipment subject to Subpart H.
 - (A) The permittee shall keep a list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in Condition 5.B.29 and instrumentation systems) subject to Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to Subpart H are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required in Condition 5.B.30(b).
 - (B) A schedule by process unit for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of 40 CFR 63.168(d).
 - (C) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
 - (2) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f).
 - (3) For pressure relief devices:
 - (A) A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a).
 - (B) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d).
 - (4) Identification of instrumentation systems subject to the provisions of Subpart H. Individual components in an instrumentation system need not be identified.
 - (5) Identification of screwed connectors subject to the requirements of 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
 - (6) The following information shall be recorded for each dual mechanical seal system:
 - (A) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
 - (B) Any changes to these criteria and the reasons for the changes.

- The following information pertaining to all valves subject to the provisions of 40 CFR 63.168(h) and (i), and connectors subject to the provisions of 40 CFR 63.174(f) and (g) of Subpart H shall be recorded:
 - (A) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
 - (B) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
 - (C) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- (8) For valves and connectors:
 - (A) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
 - (B) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j) of this subpart. This is not required unless the net credits for removed connectors is expected to be used.
- (9) For batch process units:
 - (A) A list of equipment added to batch product process units since the last monitoring period required in 40 CFR 63.178(c)(3)(ii) and (3)(iii).
 - (B) Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch process that is subject to the provisions of Subpart H. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the permittee does not adjust monitoring frequency by the time in use, as provided in 40 CFR 63.178(c)(3)(iii).
- (10) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (c) For visual inspections of equipment subject to the provisions of this subpart (e.g., §63.163(b)(3), §63.163(e)(4)(i)), the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this

inspection, except as provided in paragraph (e) of this section. These records shall be retained for 2 years.

- (d) When each leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174 of Subpart H, the following information shall be recorded and kept for 2 years:
 - (1) The instrument and the equipment identification number and the operator name, initials, or identification number.
 - (2) The date the leak was detected and the date of first attempt to repair the leak.
 - (3) The date of successful repair of the leak.
 - (4) Maximum instrument reading measured by Method 21 of 40 CFR 60, Appendix A after it is successfully repaired or determined to be nonrepairable.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak.
 - (A) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
 - (B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked onsite before depletion and the reason for depletion.
 - (6) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (7) For connectors:
 - (A) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii).
 - (B) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(A) of this section, then all connectors within the designated location shall be monitored.
 - (8) The date and results of the monitoring required in 40 CFR 63.178(c)(3)(i) for equipment added to a batch process unit since the last monitoring period required in 40 CFR 63.178 (c)(3)(ii) and (c)(3)(iii). If no leaking equipment is

found in this monitoring, the permittee shall record that the inspection was performed. Records of the actual monitoring results are not required.

- (9) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- (e) The permittee of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance with this subpart is exempt from the requirements of paragraphs (b), (c), (d), and (f). Instead, the permittee shall maintain records of the following information:
 - (1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.
 - (2) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this subpart is not required. Equipment in a batch product process subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
 - (3) The dates of each pressure test required in 40 CFR 63.178(b), the test pressure, and the pressure drop observed during the test.
 - (4) Records of any visible, audible, or olfactory evidence of fluid loss.
 - (5) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:
 - (A) The date of each pressure test and the date of each leak repair attempt.
 - (B) Repair methods applied in each attempt to repair the leak.
 - (C) The reason for the delay of repair.
 - (D) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.
 - (E) The date of successful repair.
- (f) The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165 (a) and (b). The results shall include:
 - (1) The background level measured during each compliance test.
 - (2) The maximum instrument reading measured at each piece of equipment during each compliance test.
- (g) The permittee shall maintain records of the information specified in paragraphs (g)(1) through (g)(3) for closed-vent systems and control devices subject to the provisions of 40 CFR 63.172. The records specified in paragraph (g)(1) of this section shall be retained for the life of the equipment. The records specified in paragraphs (g)(2) and

(g)(3) of this section shall be retained for 2 years.

- (1) The design specifications and performance demonstrations specified in paragraphs (g)(1)(A) through (g)(1)(D).
 - (A) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
 - (B) The dates and descriptions of any changes in the design specifications.
 - (C) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of Subpart A.
 - (D) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
- (2) Records of operation of closed-vent systems and control devices, as specified in paragraphs (g)(2)(A) through (g)(2)(C).
 - (A) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
 - (B) Dates and durations during which the monitoring system or monitoring device is inoperative.
 - (C) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
- (3) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in paragraphs (g)(3)(A) and (g)(3)(B).
 - (A) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
 - (B) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in paragraph (d) of this condition shall be recorded.
- (h) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of Subpart H under 40 CFR 63.160.

(Ref.: 40 CFR 63.181, Subpart H)

5.B.31 For Emission Points AA-007 and AA-008, the permittee shall record and maintain records of the type and amount of each fuel combusted during each month.

(Ref.: 40 CFR 60.48c(g)(2), Subpart Dc and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.32 For Emission Points AA-007 and AA-008, the permittee shall perform biennial stack testing in accordance with EPA Reference Method 7 to demonstrate compliance with the permitted emission limitations for Nitrogen Oxides. For the purpose of the compliance demonstration, the permittee shall operate the source at maximum capacity.

The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test(s) date to ensure that all test methods and procedures are acceptable to MDEQ. Also, MDEQ shall be notified in writing at least ten (10) days prior to the scheduled test date(s) so that an observer may be afforded the opportunity to witness the test(s).

After the first successful submittal of an initial written test protocol, the permittee may request that the requirement to submit the test protocol be waived for any subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

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

- 5.B.33 For Emission Points AA-007 and AA-008, the permittee shall keep the following records:
 - (a) A copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - (b) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

(Ref.: 40 CFR 63.7555(a)(1) and (2), Subpart DDDDD)

5.B.34 For Emission Points AA-007 and AA-008, the permittee shall keep records of the total hours per calendar year that an alternative fuel is burned and the total hours per calendar year the unit(s) operated during periods of gas curtailment or gas supply emergencies, if applicable.

(Ref.: 40 CFR 63.7555(h), Subpart DDDDD)

5.B.35 For Emission Points AA-007 and AA-008, all records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). These records

shall be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on site, or they must be accessible from on site (e.g., through a computer network) for at least two (2) years and may be kept off site for the remaining three (3) years.

(Ref.: 40 CFR 63.7560, Subpart DDDDD)

5.B.36 For Emission Points AA-009 and AA-010, the permittee shall maintain monthly records of the quantity of diesel combusted.

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

5.B.37 For Emission Points AA-009 and AA-010, the permittee shall install a non-resettable 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)(1), Subpart ZZZZ)

- 5.B.38 For Emission Points AA-009 and AA-010, 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)(2) and 63.6660, Subpart ZZZZ)

Page 66 of 75 Air Operating Permit No. 0800-00006

_

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
Facility wide	40 CFR 63.506(e)(6), Subpart U	5.C.1	НАР	Submit periodic reports
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).	5.C.2	HAP	Semiannual reports
AA-001	40 CFR 63.506(e)(6)(xii) and 63.505(i), Subpart U	5.C.3	НАР	Submit quarterly reports
AA-062 AA-068 AA-069	40 CFR 63.485(l)(3), Subpart U	5.C.4	НАР	Report process changes
AC-001 AF-003	40 CFR 63.492(b), Subpart U	5.C.5	НАР	Report process changes
	40 CFR 63.492(c), Subpart U	5.C.6		
AT-011 through AT-014 AT-016 through AT-022 AT-024 through AT-026 AT-050	40 CFR 63.485(1)(2), Subpart U and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.C.7	НАР	Report process changes
AA-003 AA-005 AA-085 AB-004 AB-006 AB-032 AB-033	40 CFR 63.499(f)(2), Subpart U	5.C.8	НАР	Periodic reporting of total mass of organic HAP emitted on rolling 12- month period
AA-001	40 CFR 63.118(f)(3) and (5), Subpart G	5.C.9	HAP	Deviation reporting
AF-001	40 CFR 63.182(d), Subpart H and 40 CFR 63.502(g) and 63.506(e)(6), Subpart U	5.C.10	НАР	Periodic report
AA-007 AA-008	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.11	NOx	Stack test reports

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

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
	40 CFR 63.7540(b) and 63.7550(a), (b)(5), (c)(1) and (5), (d), (h)(3), and Table 9 of Subpart DDDDD	5.C.12	НАР	Compliance report
AA-009 AA-010	40 CFR 63.6640(b), 63.6650(f), and Footnote 1 to Table 2c, Subpart ZZZZ	5.C.13	HAP	Deviation reporting
AA-003 AA-005 AA-085	PSD Construction Permit issued June 8, 2000, and modified November 8, 2012	5.C.14	VOC	Semi-annual report

- 5.C.1 The permittee shall submit semiannual reports in accordance with Condition 5.A.4 which contain the following information:
 - (a) All information specified in 40 CFR 63.117(a)(3) and 63.118(f) for continuous frontend process vents, 40 CFR 63.492 for batch front-end process vents, and 40 CFR 63.499 for back-end process operations;
 - (b) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1.
 - (c) Notification if one or more emission points (other than equipment leaks) or one or more EPPU is added to an affected source. The permittee shall submit the a description of the addition to the affected source and the group status of the additional emission point or all emission points in the EPPU;
 - (d) Reports of startup, shutdown, and malfunction as specified in 40 CFR 63.506(b)(1)(ii).
 - (e) For Emission Point AC-001, every second periodic report shall include the mass of HAP or material input to the batch unit operation during the 12-month period covered by the preceding and current periodic reports, and a statement of whether the batch front-end process vent was in or out of compliance with the batch mass input limitation.
 - (f) Notification of a change in the primary product of an EPPU, in accordance with the provisions in 40 CFR 63.480(f). This includes a change in primary product from one elastomer product to either another elastomer product or to a non-elastomer product.
 - (g) For equipment leaks subject to 40 CFR 63.502, include the information specified in 40 CFR 63.182(d) under the conditions listed in that section.

If there were no compliance exceptions noted above during the 6-month period, the periodic report shall be a statement that there were no compliance exceptions during the reporting period covered by the report and none of the activities specified above occurred during the 6-month period covered by the report.

(<u>Ref.: 40 CFR 63.506(b)(1)(ii) and (e)(6), Subpart U</u>)

- 5.C.2 For Emission Point AA-001, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that includes a summary of the following:
 - (a) All instances in the reporting period when gases were routed to the flare while either there was no pilot flame present or the monitor was not operating; and
 - (b) A summary of the weekly visual observations.

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

5.C.3 For Emission Point AA-001, the permittee shall submit quarterly reports due no later than 60 days after the end of each quarter for a period of one (1) year if the flare has more than one excursion in a semi-annual reporting period. The report shall include all information from Condition 5.C.1 as applicable to the flare.

After quarterly reports have been submitted for one (1) year without more excursions occurring (during that year) than the number of excused excursions allowed under 40 CFR 63.505(i), the permittee may return to semi-annual reporting.

(Ref.: 40 CFR 63.506(e)(6)(xii) and 63.505(i), Subpart U)

5.C.4 For Emission Points AA-062, AA-068, and AA-069, whenever a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 continuous front-end process vent with a flow rate less than 0.005 standard cubic meters per minute (scmm) to become a Group 2 continuous front-end process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0, the permittee shall submit a report within 180 days after the process change is made or with the next periodic report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the permittee shall comply with the provisions in 40 CFR 63.113(d) by the dates specified in 40 CFR 63.481.

The permittee is not required to submit a report of a process change if the change does not meet the description of a process change in 40 CFR 63.115(e) or if the vent stream flow rate is recalculated according to 40 CFR 63.115(e) and the recalculated value is less than 0.005 standard cubic meters per minute.

(Ref.: 40 CFR 63.485(1)(3), Subpart U)

5.C.5 For Emission Points AC-001 and AF-003, whenever a process change, as defined in 40 CFR 63.488(i)(1), is made that causes the vent to become a Group 1 batch front-end process vent, the permittee shall notify the MDEQ and submit a description of the process change within 180 days after the process change is made or with the next periodic report, whichever is later. The permittee shall comply with the Group 1 batch front-end process vent provisions in 40 CFR 63.486 through 63.492 in accordance with 40 CFR 63.480(i)(2)(ii).

(Ref.: 40 CFR 63.492(b), Subpart U)

- 5.C.6 For Emission Points AC-001 and AF-003, whenever a process change, as defined in 40 CFR 63.488(i)(1), is made that causes the vent to have annual emissions greater or equal to the level specified in 40 CFR 63.488(d) but remains a Group 2 batch front-end process vent, or if a process change is made that requires the permittee to redetermine the batch mass input limitation as specified in 40 CFR 63.488(i)(3), the permittee shall submit a report within 180 days after the process change is made or with the next periodic report, whichever is later. The following information shall be submitted:
 - (a) A description of the process change;
 - (b) The batch mass input limitation determined in accordance with 40 CFR 63.487(f)(1).

(<u>Ref.: 40 CFR 63.492(c), Subpart U</u>)

5.C.7 For Emission Points AT-011 through AT-014, AT-016 through AT-022, AT-024 through AT-026, and AT-050, whenever a process change, as defined in 40 CFR 63.115(e) is made that causes a Group 2 continuous front-end process vent with a TRE greater than 4.0 to become a Group 2 continuous front-end process vent with a TRE less than 4.0, the permittee shall submit a report within 180 days after the process change is made or with the next periodic report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the permittee shall comply with the provisions in 40 CFR 63.113(d) by the dates specified in 40 CFR 63.481.

(Ref.: 40 CFR 63.485(1)(2), Subpart U and PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

5.C.8 For Emission Points AA-003, AA-005, AA-085, AB-004, AB-006, AB-032, and AB-033, periodic reports required to be submitted by Condition 5.C.1 shall include the total mass of organic HAP emitted for each of the rolling 12-month periods in the reporting period divided by the total mass of elastomer produced during the corresponding 12-month period, determined in accordance with 40 CFR 63.495(g)(5).

(<u>Ref.: 40 CFR 63.499(f)(2)</u>, <u>Subpart U</u>)

- 5.C.9 For Emission Point AA-001, the periodic report shall contain the following information:
 - (a) Times and durations of all periods recorded in accordance with Condition 5.B.8(b)

when the gas stream was diverted to the atmosphere through a bypass line.

(b) Times and durations of all periods recorded in accordance with Condition 5.B.8(a) during which the pilot flame of the flare was absent or the monitor was not operating.

(Ref.: 40 CFR 63.118(f)(3) and (5), Subpart G)

- 5.C.10 For Emission Point AF-001, the permittee shall submit semi-annual periodic reports containing the information listed in (a) through (g) below.
 - (a) The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leakers, and the total number of valves monitored;
 - (b) The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable;
 - (c) The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;
 - (d) The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable;
 - (e) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
 - (f) The results of all monitoring to show compliance with 40 CFR 63.165(a), and 63.172(f) conducted within the semiannual reporting period.
 - (g) If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i).

(Ref.: 40 CFR 63.182, Subpart H and 40 CFR 63.502(g) and 63.506(e)(6), Subpart U)

5.C.11 For Emission Points AA-007 and AA-008, the permittee shall submit the stack test reports within forty-five (45) days after the completion of a required stack test.

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

- 5.C.12 For Emission Points AA-007 and AA-008, the permittee shall submit a compliance report once every five years. This reporting period corresponds with the requirement to conduct a tune-up on each boiler once every five years. The compliance report shall contain the following:
 - (a) Company and Facility name and address.
 - (b) Process unit information, emissions limitations, and operating parameter limitations.
 - (c) Date of report and beginning and ending dates of the reporting period.
 - (d) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up. Include the date of the most recent burner

inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(e) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

In addition to the information required above, if there are no deviations from the operating limits or work practice standards for periods of startup and shutdown from Table 3 of Subpart DDDDD, the report shall also include a statement that there were no deviations from the standards during the reporting period. If there is a deviation from an operating limit or work practice standard for periods of startup and shutdown, the report must also contain the following information:

- (f) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.
- (g) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

The permittee must submit all reports required by Table 9 of Subpart DDDDD electronically to the EPA via the CEDRI (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the MDEQ. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

(Ref.: 40 CFR 63.7540(b), 63.7550(a), (b)(5), (c)(1) and (5), (d), (h)(3), and Table 9 of Subpart DDDDD)

5.C.13 For Emission Points AA-009 and AA-010, the permittee shall report all deviations from any emission or operating limitation of Subpart ZZZZ in the semi-annual report required by Condition 5.A.4. 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 schedule posed an unacceptable risk under federal, state, or local law, the permittee shall include in the report the reason for the delay.

(Ref.: 40 CFR 63.6640(b), 63.6650(f), and Footnote 1 to Table 2c, Subpart ZZZZ)

- 5.C.14 The permittee shall submit semi-annual reports providing:
 - (a) The type, grade, and quantity of elastomer product(s) produced.
 - (b) The VOC content of each elastomer product produced.

- (c) For each emission point in the A-Line Back-End Process, the VOC emission rate in pounds per hour and tons per year for each consecutive 12-month period.
- (b) For the total A-Line Back-End process, the total combined VOC emission rate in tons per year for each consecutive 12-month period.
- (c) A description of the method(s) used to determine the quantity of elastomer product(s) produced, the VOC data, and the emission rate.

The semi-annual report shall be submitted in accordance with Condition 5.A.4.

(Ref.: PSD Construction Permit issued June 8, 2000, and modified November 8, 2012)

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
	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
	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
НР	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
	Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 μ m in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SII SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VEE VHAP	Volatile Hazardous Air Pollutant
VHAP	
	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 63, Subpart U, NESHAP Emissions: Group I Polymers and Resins

40 CFR 63, Subpart G, National Emission Standards for Organic HAP from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

40 CFR 63, Subpart F, National Emission Standards for Organic HAP from the Synthetic Organic Chemical Manufacturing Industry

40 CFR 63, Subpart H, National Emission Standards for Organic HAP for Equipment Leaks

40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

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

APPENDIX C

List of Emission Units which Vent to the Flare

Vents from the following equipment have been designated by Zeon as Group 1 process vents subject 40 CFR 63, Subpart U and are vented to the flare for control:

Emission Unit Description	Zeon Reference No.
Coagulator	A-41
Batch Still Column	A-70
Distillation Column	A-86
Catalyst Condenser	E-26
Catalyst Reactor Condenser	E-27
Partial Condenser	E-40
Coagulator Condenser	E-41
Vent Condenser	E-42
Second Stage Coagulation Condenser	E-44
Batch Still Reboiler	E-70
Batch Still Condenser	E-71
Batch Still Vent Cooler	E-72
A-86 Reboiler	E-86-2
A-86 Condenser	E-86-3
Catalyst Reactor	R-22
Polymerizer	R-33
Coagulator A-40 Demister	S-40
Coagulator Separator	S-41
Slurry Hold Tank Separator	S-44
Catalyst Hold Tank, 270 gal.	T-26
Catalyst Hold Tank, 4,000 gal.	T-28
Vent Tank, 2,900 gal.	T-34
Head Tank, 39.66 gal.	T-35
Cement Hold Tank, 9,137 gal.	T-37
Reactor Out Tank, 6,000 gal.	T-42
Slurry Hold Tank, 5,013 gal.	T-43
Batch Still Pot	T-70
Reflux Tank, 125 gal.	T-86
Weigh Tank, 773 gal.	T-91
Weigh Tank, 517 gal.	T-92
Head Tank, 88 gal.	T-100
Weigh Tank, 160 gal.	T-2092
1st Stage Coagulator	A-1040
Slurry Hold Tank, 5,875 gal.	A-1041
Catalyst Reactor Condenser	E-1027

Emission Unit Description	Zeon Reference No.
Partial Condenser	E-1040
Vent Condenser	E-1042
Coagulator Condenser	E-4041
Slurry Tank Condenser	E-4044
Catalyst Reactor, 1,649 gal.	R-1022
Polymerizer	R-1033
Reactor Out Polymerizer	R-1042
Coagulator Separator	S-1041
Second Stage Coagulator Separator	S-1044
Cement Hold Tank, 9,136 gal.	T-1037
Catalyst Hold Tank, 5,331 gal.	T-4028
Mix Tank, 8.8 gal.	T-4093
Mix Tank, 11.99 gal.	T-4094
Distillation Column	A-500
Distillation Column	A-501
Distillation Column	A-1086
Toluene Stripper Reboiler	E-500-2
Toluene Stripper Condenser	E-500-3
Toluene Stripper Vent Condenser	E-500-4
Toluene Feed Preheater	E-500-5
Bottoms Still Reboiler	E-501-2
Bottoms Still Condenser	E-501-3
Bottoms Still Vent Condenser	E-501-4
Reboiler	E-502-2
Light Ends Still Condenser	E-1086-3
Light Ends Still Reboiler	E-1086-2
Reflux Drum	S-71
Toluene Stripper Reflux Tank	T-500-7
Bottoms Still Reflux Tank 640 gal.	T-501-7
Solvent Water Separator	S-2049
Spent Solvent Coalescer	S-2050
Flare Separator	S-150
Solvation Tank	T-2095
Solvation Hold Tank	T-2096
Ether Storage Tank Manual Vent	T-11
Second Stage Spent Solvent Tank	T-99