STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL

PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

THIS CERTIFIES THAT

Kemira Chemicals, Inc. 10930 Darracott Road Aberdeen, Mississippi Monroe County

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

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: January 19, 2022 Permit No.: 1840-00013

Effective Date: As specified herein.

Expires: December 31, 2026

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Section 1.

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.

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

2. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)

3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)

4. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)

6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

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

7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

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

8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials:

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

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

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

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

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

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

- 11. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
 - a. Routine maintenance, repair, and replacement;
 - b. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - c. Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - d. Use of an alternative fuel or raw material by a stationary source which:

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

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

B. GENERAL OPERATIONAL CONDITIONS

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

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

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

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

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

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

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

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(1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

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

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

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

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

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

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

C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

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

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

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

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

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

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

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

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

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

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

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SECTION 2 EMISSION POINT DESCRIPTION

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

| Emission Point | Description | | | | | | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| AD-101 | Acrylamide (AMD) Reactor Process, vents to Scrubber H-380 (Emission Point AD-102) | | | | | | |
| AD-102 | Packed Bed Scrubber (H-380) controlling emissions from AMD Reactor Process (Emission Points AD-101, AT-302, AT-303, AT-306, and AT-307), TIP Reactor Process (Emission Point AP-103), Mix Tanks (Emission Points AT-351 through AT-355), Acrylic Acid Tank (Emission Point AT-335), and AMD Storage Tank (Emission Points AT-301 and AT-304) | | | | | | |
| AD-500 | 14.87 MMBTU/hr Natural Gas Direct-Fired Band Dryer associated with Cationic/Anionic Manufacturing | | | | | | |
| AD-501 | 40 MMBTU/hr Steam Fluidized Bed Dryer associated with TIP Process | | | | | | |
| AD-502 | 800 hp (29.8 MMBTU/hr) Natural Gas Fired Boiler to generate steam for the fluidized bed | | | | | | |
| AD-504 | 235 hp Diesel Emergency Fire Pump Engine (Plant 4) manufactured in 1994 | | | | | | |
| AD-505 | 415 hp Diesel Emergency Generator (AMD old Plant 2) manufactured in 1999 | | | | | | |
| AD-506 | 250 hp Diesel Emergency Generator (Plant 4 power and lighting) manufactured in 1994 | | | | | | |
| AD-507 | 32 hp Natural Gas Emergency Generator (Plant 4 Data Center) manufactured in 1999 | | | | | | |
| AD-510 | Belt Reactor | | | | | | |
| AD-511 | 755 hp Diesel Emergency Generator manufactured in 2015 | | | | | | |
| AD-512 | Scrubber No. 1: Packed Bed Scrubber controlling Emissions from the Acrylonitrile Storage Tank (AT-321) | | | | | | |
| AP-102 | Cationic/Anionic Powder Process | | | | | | |
| AP-103 | TIP Reactor Process, vents to Emission Point AD-102 | | | | | | |
| AT-301 | 47,000 gallon AMD Storage Tank, vents to Emission Point AD-102 | | | | | | |
| AT-302 | 8,240 gallon AMD Reactor #1 (AMDR1), vents to Emission Point AD-102 | | | | | | |
| AT-303 | 8,240 gallon AMD Reactor #2 (AMDR2), vents to Emission Point AD-102 | | | | | | |
| AT-304 | 8,554 gallon AMD Settling Tank, vents to Emission Point AD-102 | | | | | | |
| AT-306 | 8,240 gallon AMD Reactor #3 (AMDR3), vents to Emission Point AD-102 | | | | | | |
| AT-307 | 8,240 gallon AMD Reactor #4 (AMDR4), vents to Emission Point AD-102 | | | | | | |
| AT-321 | 50,000 gallon Acrylonitrile Storage Tank, vents to Emission Point AD-512 | | | | | | |

| Emission Point | Description |
|-------------------|-------------------------------------------------------------------------------------|
| AT-335 | 32,000 gallon Acrylic Acid Storage Tank, vents to Emission Point AD-102 |
| AT-351 | 2,500 gallon Anionic and Cationic Monomer Mix Tank, vents to Emission Point AD-102 |
| AT-352 | 2,500 gallon Anionic and Cationic Monomer Mix Tank, vents to Emission Point AD-102 |
| AT-353 | 2,500 gallon Anionic and Cationic Monomer Mix Tank, vents to Emission Point AD-102 |
| AT-354 | 6,000 gallon Anionic and Cationic Monomer Mix Tank, vents to Emission Point AD-102 |
| AT-355 | 4,500 gallon Anionic and Cationic Monomer Hold Tank, vents to Emission Point AD-102 |
| AT-356 | 7,925 gallon Water Phase Storage Tank |
| AT-357 | 7,925 gallon Water Phase Storage Tank |
| AT-358 | AMD 40% Weigh Tank |
| AT-359 | GAA Weigh Tank |
| AT-360 | 50 gallon Monomer View Tank |
| AT-361 | Gel Receiver |
| AT-362 | Water Buffer Tank |
| AT-363 | AMD Hold Tank |
| AD-513 | Cooling Towers |
| AD-514 | Wastewater Tank |
| AD-515 | Pilot Plant |
| AD-516 | Plant 100 Bio Totes |
| AD-517 | Initiator Area Tanks |

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------|--------------------------|
| Facility Wide | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.1 | VOC | <=99.0 tons/year |
| wide | | 3.2 | Individual HAP | <=9.0 tons/year |
| | Total HAP | | <=24.0 tons/year | |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.A. and B. | 3.3 | Opacity | <= 40% |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1). | 3.4 | PM (filterable only) | $E = 4.1*p^{0.67}$ |
| AD-500 AD-502 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.5 | Fuel | Natural Gas Only |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | 3.6 | PM (filterable only) | $E = 0.8808*I^{-0.1667}$ |
| AD-502 | 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1). | 3.7 | SO ₂ 4.8 lb/MMBTU heat input | |
| AD-504 AD-505 AD-506 AD-507 AD-511 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a). | 3.8 | PM (filterable only) | 0.6 lb/MMBTU heat input |
| AD-502 | 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units 40 CFR 60.40c(a) and (c) | 3.9 | SO_2 | Applicability |
| AD-504 AD-505 AD-506 AD-507 AD-511 | 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) 40 CFR 63.6580, and 63.6585(a) and (c) | 3.10 | НАР | Applicability |

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| AD-511 | 40 CFR 63.6590(c)(1), Subpart ZZZZ | 3.11 | | Comply with Subpart ZZZZ by complying with NSPS Subpart IIII |
| AD-504 AD-505 AD-506 | 40 CFR 63.6603(a), 63.6625(i), and Item 4 of Table 2d, Subpart ZZZZ | 3.12 | Work Practice Standards | Maintenance Requirement |
| AD-507 | 40 CFR 63.6603(a), 63.6625(j), and Item 5 of Table 2d, Subpart ZZZZ | 3.13 | | |
| AD-540 AD-505 | 40 CFR 63.6605, Subpart ZZZZ | 3.14 | General Requirements | Compliance at all times |
| AD-506 AD-507 | Suopar EEEE | | Good Air Pollution Control Practices | Operate and maintain the engines in a manner consistent with safety and good air pollution control practices for minimizing emissions. |
| | 40 CFR 63.6625(e)(3), Subpart ZZZZ | 3.15 | General Requirements | Operate according to manufacturer's emission- related written instructions or develop maintenance plan |
| | 40 CFR 63.6625(f), Subpart ZZZZ | 3.16 | Hours of Operation | Install a non-resettable hour meter |
| | 40 CFR 63.6625(h), Subpart ZZZZ | 3.17 | General Requirements | Minimize the engine's time spent at idle |
| | 40 CFR 63.6640(f)(1), (2), and (4), Subpart ZZZZ | 3.18 | Operating Time | Emergency Operation Requirements |
| AD-511 | 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200(a)(2)(i) | 3.19 | NMHC + NOx CO PM | Applicability |
| | 40 CFR 60.4205(b), Subpart IIII | 3.20 | | Comply with to 40 CFR 60.4202 |
| | 40 CFR 60.4202(a)(2), Subpart IIII, 40 CFR | 3.21 | | Comply with Tier 2 or Tier 3 emissions standards and smoke standards |
| | 1039, Appendix I, and 40 CFR 1039.105 | | NMHC + NOx | 6.4 g/kw-hr |
| | | | СО | 3.5 g/kw-hr |
| | | | PM | 0.20 g/kw-hr |

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| | | | Smoke | 20% during the acceleration mode 15 % during lugging mode 50 % during the peaks in either the acceleration or lugging modes |
| | 40 CFR 60.4206, Subpart IIII | 3.22 | NMHC+ NOx | Comply over the life of the engine |
| | | | PM | |
| | | | Smoke | |
| | 40 CFR 60.4207(b), Subpart IIII and 40 CFR 1090.305 | 3.23 | Fuel | Max sulfur content of diesel fuel ≤15 ppm Min. cetane index of 40 or max aromatic content |
| | | | | of 35 volume percent. |
| AD-511 | 40 CFR 60.4209(a), Subpart IIII | 3.24 | Hours of operation | Install a non-resettable hour meter |
| | 40 CFR 60.4211(a), Subpart IIII | 3.25 | NMHC+ NOx | Certified engine requirements |
| | 40 CFR 60.4211(c), Subpart IIII | 3.26 | CO PM | Purchase a certified engine and installed and configured according to manufacturer's emission-related specifications |
| | 40 CFR 60.4211(f), Subpart IIII | 3.27 | Smoke | Operating requirements |
| AT-321 | 40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 40 CFR 60.110b(a) | 3.28 | VOC | Applicability |
| | 40 CFR 60.112b(a)(3), Subpart Kb | 3.29 | | Closed Vent System Requirements |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.30 | | Emissions routed to Scrubber (Emission Point AD-512) at all times |

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------------------------------------------------------------|
| AD-101 AP-103 AT-301 AT-302 AT-303 AT-304 AT-306 AT-307 AT-335 AT-350 AT-351 AT-352 AT-353 AT-353 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.31 | VOC НАР | Emissions routed to Scrubber (Emission Point AD-102) at all times |
| Facility Wide | 40 CFR 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry which Construction, Reconstruction or Modification commenced after November 7, 2006 40 CFR 60.480a(a), (b), (c), and (d) | 3.32 | VOC | Applicability |
| | 40 CFR 60.482-1a(a), (b), and (d), Subpart VVa | 3.33 | | Standards: General |
| | 40 CFR 60.482-2a, Subpart VVa | 3.34 | | Standards: Pumps in light liquid service |
| | 40 CFR 60.482-3a, Subpart VVa | 3.35 | | Standards: Compressors |
| Facility Wide | 40 CFR 60.482-4a, Subpart VVa | 3.36 | VOC | Standards: Pressure relief devices in gas/vapor service |
| | 40 CFR 60.482-5a, Subpart VVa | 3.37 | | Standards: Sampling connection systems |
| | 40 CFR 60.482-6a, Subpart VVa | 3.38 | | Standards: Open-ended valves or lines |
| | 40 CFR 60.482-7a, Subpart VVa | 3.39 | | Standards: Valves in gas/vapor service and in light liquid service |

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|-------------------|-----------------------------------|------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| | 40 CFR 60.482-8a, Subpart VVa | 3.40 | | Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service |
| | 40 CFR 60.482-9a, Subpart VVa | 3.41 | | Standards: Delay of repair |
| | 40 CFR 60.482-10a, Subpart VVa | 3.42 | | Standards: Closed vent systems and control devices |
| | 40 CFR 60.482-11a, Subpart VVa | 3.43 | | Standards: Connectors in gas/vapor service and in light liquid service |
| | 40 CFR 60.483-1a, Subpart VVa | 3.44 | | Valve leak allowable percentage requirements |
| | 40 CFR 60.483-2a, Subpart VVa | 3.45 | | Alternative work practices |

3.1 For the Entire Facility, the permittee shall limit volatile organic compound (VOC) emissions to no more than 99.0 tons/year as determined for each consecutive 12-month period on a rolling basis.

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

3.2 For the Entire Facility, the permittee shall limit hazardous air pollutant (HAP) emissions to no more than 9.0 tons/year of any single HAP and no more than 24.0 tons/year of total combined HAP as determined for each consecutive 12-month period on a rolling basis.

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

3.3 For the Entire Facility, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

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.

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 and 1.3.B)

3.4 For the Entire Facility, the permittee shall not cause, permit, or allow the emission of particulate matter in total quantities in excess of the amount determined by the relationship

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

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

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

3.5 For Emission Points AD-500 and AD-502, the permittee shall burn natural gas only.

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

3.6 For Emission Points AD-500 and AD-502, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations shall not exceed an emission rate as determined by the relationship

$$E = 0.8806*I^{-0.1667}$$

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

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

3.7 For Emission Point AD-502, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.8 For Emission Points AD-504, AD-505, AD-506, AD-507, and AD-511, the maximum permissible emission of ash and/or particulate matter from fossil fuel installations 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).)

3.9 For Emission Points AD-502, the permittee is subject to and shall comply with all applicable requirements of the New Source Performance Standard (NSPS) for Small Industrial, Commercial, Institutional Steam Generating Units (40 CFR 60, Subpart Dc) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.40c, Subpart Dc)

3.10 For Emission Points AD-504, AD-505, AD-506, AD-507, and AD-511, the permittee is subject to and shall comply with all applicable requirements of National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion

Engines (40 CFR 63, Subpart ZZZZ) and the General Provisions (40 CFR 63, Subpart A).

Emission Point AD-504 is an existing diesel fired (compression ignition (CI)) emergency fire pump engine.

Emission Point AD-505 is an existing diesel fired (compression ignition (CI)) emergency generator.

Emission Point AD-506 is an existing diesel fired (compression ignition (CI)) emergency generator.

Emission Point AD-507 is an existing natural gas fired (spark ignition (SI)) emergency generator.

Emission Point AD-511 is a new diesel fired (compression ignition (CI)) emergency generator.

(Ref.: 40 CFR 63.6580, and 63.6585(a) and (c), Subpart ZZZZ)

3.11 For Emission Point AD-511, the permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for this engine under Subpart ZZZZ.

(Ref.: 40 CFR 63.6590(c)(1), Subpart ZZZZ)

- 3.12 For Emission Points AD-504, AD-505, and AD-506, the permittee shall comply with the requirements in Table 2d of 40 CFR 63, Subpart ZZZZ.
 - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first.
 - (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.

The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement listed above. The oil analysis must be performed at the same frequency specified above for changing the oil. The analysis program shall contain the information contained in 40 CFR 63.6625(i). The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(Ref.: 40 CFR 63.6603(a) and 63.6625(i) and Item 4 of Table 2d, Subpart ZZZZ)

3.13 For Emission Point AD-507, the permittee shall comply with the requirements in Table 2d of 40 CFR 63, Subpart ZZZZ.

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first.
- (b) Inspect spark plugs 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.

The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement listed above. The oil analysis must be performed at the same frequency specified above for changing the oil. The analysis program shall contain the information contained in 40 CFR 63.6625(j). The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(Ref.: 40 CFR 63.6603(a), and 63.6625(j) and Item 5 of Table 2d, Subpart ZZZZ)

- 3.14 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall comply with the following:
 - (a) Be in compliance with the emission limitations, operating limitation, and other requirements in Subpart ZZZZ that apply at all times.
 - (b) Operate and maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard 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 records, and inspection of the source.

(Ref.: 40 CFR 63.6605, Subpart ZZZZ)

3.15 For Emission Points AD-504, AD-505, AD-506 and AD-507, the permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) 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 practice for minimizing emissions.

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

3.16 For Emission Points AD-504, AD-505, AD-506 and AD-507, the permittee shall install a non-resettable hour meter if one is not already installed.

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

3.17 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall minimize the engine's time spent at idle during startup and minimize the 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(h), Subpart ZZZZ)

- 3.18 For Emission Points AD-504, AD-505, AD-506, and AD-507, , the permittee shall operate the emergency stationary RICE according to the requirements in (a) through (c) below. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year is prohibited. If you do not operate the engine according to the requirements below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (b) The permittee shall operate the emergency stationary RICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by (c) of this condition counts as part of the 100 hours per calendar year allowed. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that 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 the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. 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 an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

3.19 For Emission Point AD-511, the permittee is subject to and shall comply with all applicable requirements of Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines(ICE) (40 CFR 60, Subpart IIII) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.4200(a)(2)(i) and (ii), Subpart IIII)

3.20 For Emission Point AD-511, the permittee shall comply with the emission standards in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary engine.

(Ref.: 40 CFR 60.4205(b), Subpart IIII)

- 3.21 For Emission Point AD-511, the permittee shall comply the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR 1039, Appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105.
 - (a) NMHC + NOx 6.4 g/kw-hr
 - (b) CO 3.5 g/kw-hr
 - (c) PM 0.20 g/kw-hr
 - (d) Smoke from the engine shall not exceed the following standards:
 - (1) 20 percent during the acceleration mode
 - (2) 15 percent during the lugging mode
 - (3) 50 percent during the peaks in either the acceleration or lugging modes.

(Ref.: 40 CFR 60.4202(a)(2), Subpart IIII, Appendix I to Part 1039, and 40 CFR 1039.105))

3.22 For Emission Point AD-511, the permittee shall operate and maintain stationary CI ICE over the entire life of the engine.

(Ref.: 40 CFR 60.4206, Subpart IIII)

- 3.23 For Emission Point AD-511, the permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.
 - (a) Max sulfur content of diesel fuel ≤ 15 ppm
 - (b) Min. centane index of 40 or max aromatic content of 35 volume percent.

(Ref.: 40 CFR 4207(b), Subpart IIII and 40 CFR 1090.305)

3.24 For Emission Point AD-511, the permittee shall install a non-resettable hour meter prior to startup of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart IIII)

3.25 For Emission Point AD-511, the permittee shall comply with the following:

- (a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission related written instructions,
- (b) Change only those emission-related settings that are permitted by the manufacturer, and
- (c) Meet the requirements of 40 CFR 89, 94, and/or 1068 as they apply.

(Ref.: 40 CFR 60.4211(a), Subpart IIII)

3.26 For Emission Point AD-511, the permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c), Subpart IIII)

- 3.27 For Emission Point AD-511, the permittee shall operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c), is prohibited. If you do not operate the engine according to the requirements in paragraphs (a) through (c), the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines.
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (b) The permittee shall operate the emergency stationary ICE for any combination of the purposes specified in the paragraph below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed.
 - Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that 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 the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance

and testing and emergency demand response. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f), Subpart IIII)

3.28 For Emission Point AT-321, the permittee is subject to and shall comply with all applicable requirements of Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification commenced after July 23, 1984 (40 CFR 60, Subpart Kb) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.110b(a), Subpart Kb)

- 3.29 For Emission Point AT-321, the permittee shall equip the storage vessel with a closed vent system and control device which meets the following specifications:
 - (a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections.
 - (b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent of greater.

(Ref.: 40 CFR 60.112b(a)(3), Subpart Kb)

3.30 For Emission Point AT-321, emissions shall be vented to the scrubber (Emission Point AD-512) at all times.

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

3.31 For Emission Points AD-101, AP-103, AT-301, AT-302, AT-303, AT-304, AT-306, AT-307, AT-335, AT-350, AT-351, AT-352, AT-353, AT-354, and AT-355, emissions shall be vented to the scrubber (Emission Point AD-102) at all times.

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

3.32 For the Entire Facility, the permittee is subject to and shall comply with all applicable requirements of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification commenced after November 7, 2006 (40 CFR 60, Subpart VVa) and the General Provisions (40 CFR 60, Subpart A) for equipment in VOC service, as described in conditions 3.33 through 3.45 of this permit. As used in this permit, all terms not defined herein shall have the meaning given to them in the Clean Air Act (CAA), Subpart VVa, or Subpart A.

(Ref.: 40 CFR 60.480a(a), (b), and (c), Subpart VVa)

- 3.33 For the Entire Facility, the permittee shall comply with the following general standards:
 - (a) Demonstrate compliance with the requirements of 40 CFR 60.482-1a through 60.482-10a or 40 CFR 60.480a(e) for all equipment within 180 days of initial startup.
 - (b) Compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a.
 - (c) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a through 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5).

(Ref.: 40 CFR 60.482-1a(a), (b), and (d))

- 3.34 For the Entire Facility, each pump in light liquid service shall comply with the following:
 - (a) Monitor each pump monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) except as provided in 40 CFR 60.482-1a(c) and (f), and 60.482-2a(d), (e), and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR 60.482-1a(c), and 60.482-2a(d), (e), and (f). Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal except as provided in 40 CFR 60.482-1a(f).
 - (b) The instrument reading that defines a leak is 2,000 parts per million (ppm). If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedures outlined below. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument readings was less than 2,000 ppm.
 - (1) Monitor the pump within 5 days as specified in 40 CFR 60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak. The leak shall be repaired using the procedures in (c).
 - (2) Designate the visual indications of liquids dropping as a leak, and repair the leak using either the procedures in (c) by eliminating the visual indications of liquids dripping.
 - (c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than five calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described below:
 - (1) Tightening the packing gland nuts;
 - (2) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Any pump that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of of this section if:

- (1) If the permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
- (2) If the permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(Ref.: 40 CFR 60.482-2a, Subpart VVa)

- 3.35 For the Entire Facility, the permittee shall comply with the following standards for compressors:
 - (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-1a(c) and paragraphs (h), (i), and (j).
 - (b) Each compressor seal system as required in paragraph (a) shall be:
 - (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10a; or
 - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
 - (c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
 - (d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
 - (e) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
 - (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e), a leak is detected.

(g) 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 40 CFR 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

- (h) A compressor is exempt from the requirements of paragraphs (a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 60.482-10a, except as provided in paragraph (i) of this section.
- (i) Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a) through (h) if the compressor:
 - (1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60.485a(c); and
 - (2) Is tested for compliance with paragraph (i)(1) initially upon designation, annually, and at other times requested by the DEQ.
- (j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR 60.14 or 60.15 is exempt from paragraphs (a) through (e) and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h).

(Ref.: 40 CFR 60.482-3a, Subpart VVa)

- 3.36 For the Entire Facility, the permittee shall comply with the following:
 - (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c).
 - (b) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as 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 the pressure release, except as provided in 60.482-9a. No later than five (5) calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485a(c).

- (c) 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 through the pressure relief device to a control device is exempted from the requirements of (a) and (b)
- (d) The permittee shall comply with the following:
 - (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of (a) and (b), provided the permittee complies with the requirements in (2) below.
 - (2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9.

(Ref.: 40 CFR 60.482-4a, Subpart VVa)

- 3.37 For the Entire Facility, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system except as provided in 40 CFR 60.482-1a(c) and 60.482-5a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the following requirements:
 - (a) Gases displaced during filling of the sample container are not required to be collected or captured;
 - (b) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied;
 - (c) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.
 - (d) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet the following requirements:
 - (1) Return the purged process fluid directly to the process line.
 - (2) Collect and recycle the purged process fluid to a process.
 - (3) Capture and transport all the purged process fluid to a control device.

(Ref.: 40 CFR 60.482-5a, Subpart VVa)

- 3.38 For the Entire Facility, the permittee shall comply with the following:
 - (a) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve except as provided in 40 CFR 60.482-1a(c) and 60.482-6a(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.

- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with (a) at all other times.
- (d) All 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 (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 are exempt from the requirements of paragraphs (a) through (c) of this condition.

(Ref.: 40 CFR 60.482-6a, Subpart VVa)

- 3.39 For the Entire Facility, each valve shall be monitored monthly to detect leaks by the requirements in 40 CFR 60.485a(b) and shall comply with the following except as provided in 40 CFR 60.482-1a(c) and (f), 60.483-1a, 60.483-2a and 60.482-7a(f), (g), and (h):
 - (a) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
 - (b) Any valve for which a leak is not detected for two (2) successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. As an alternative to monitoring all the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every three (3) months. The permittee must keep records of the valves assigned to each subgroup. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two (2) successive months.
 - (c) When a leak is detected, the valve shall be repaired as soon as practical, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
 - (d) First attempts at repair include, but are not limited to, the following best practices where practical:
 - (1) Tightening of bonnet bolts,
 - (2) Replacement of bonnet bolts,
 - (3) Tightening of packing gland nuts;
 - (4) Injection of lubricant into lubricated packing.

(Ref.: 40 CFR 60.482-7a, Subpart VVa)

3.40 For the Entire Facility, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the permittee shall monitor the equipment within five (5) days by the methods specified in 40 CFR 60.485a(b) or the permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within five (5) calendar days of detection.

If the permittee monitors the equipment and an instrument reading of 10,000 ppm or greater is measured then 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 40 CFR 60.486a(c). The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected. First attempts at repair include, but are not limited to the best practices described in 60.482-2a(c)(2) and 60.482-7a(e).

(Ref.: 40 CFR 60.482-8a, Subpart VVa)

- 3.41 For the Entire Facility, delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair shall occur within 15 days after startup of the process unit. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair for valves and connectors will be allowed if:
 - (a) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - (b) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device.

Delay of repair for pumps will be allowed if:

- (a) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
- (b) Repair is completed as soon as practical, but not later than 6 months after the leak was detected.

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 next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

(Ref.: 40 CFR 60.482-9a, Subpart VVa)

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- 3.42 For the Entire Facility, the permittee shall comply with the following:
 - (a) Closed vent systems and control devices used to comply with 40 CFR 60 Subpart VVa shall comply with the provisions of this condition.
 - (b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume (ppmv), whichever is less stringent.
 - (c) Control devices used to comply with the provisions 40 CFR 60 Subpart VVa, the permittee shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
 - (d) Except as provided in paragraphs (g) through (i), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (d)(1) and (2).
 - (1) If the vapor collection system or closed vent system is constructed of hardpiping, the permittee shall comply with the requirements specified in paragraphs (d)(1)(i) and (ii):
 - (i) Conduct an initial inspection according to the procedures in 40 CFR 60.485a(b); and
 - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - (2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:
 - (i) Conduct an initial inspection according to the procedures in 40 CFR 60.485a(b); and
 - (ii) Conduct annual inspections according to the procedures in 40 CFR 60.485a(b).
 - (e) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (f).
 - (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - (2) Repair shall be completed no later than 15 calendar days after the leak is detected.
 - (f) 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.

- (g) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (d)(1)(i) and (f)(2).
- (h) Any parts of the closed vent system that are designated, as described in paragraph (j)(1), as unsafe to inspect are exempt from the inspection requirements of paragraphs (d)(1)(i) and (d(2) if they comply with the requirements specified in paragraphs (h)(1) and (2):
 - (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 paragraphs (d(1)(i) or (d)(2); and
 - (2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- (i) Any parts of the closed vent system that are designated, as described in paragraph (j)(2), as difficult to inspect are exempt from the inspection requirements of paragraphs (d)(1)(i) and (d(2)) if they comply with the requirements specified in paragraphs (i)(1) through (3):
 - (1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - (2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
 - (3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- (j) Closed vent systems and control devices used to comply with provisions of 40 CFR 60 Subpart VVa shall be operated at all times when emissions may be vented to them.

(Ref.: 40 CFR 60.482-10a, Subpart VVa)

- 3.43 For the Entire Facility, the permittee shall comply with the following:
 - (a) Except as allowed in 40 CFR 60.482-1a(c), 60.482-10a, or as specified in paragraph (d), the permittee shall monitor all connectors in gas and vapor and light liquid service as specified in paragraph(a)(3).

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(1) The connectors shall be monitored to detect leaks by the method specified in 40 CFR 40 CFR 60.485a(b) and, as applicable, 40 CFR 60.485a(c).

- (2) If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.
- (3) The permittee shall perform monitoring as specified in (i) through (iii) below, and shall comply with the requirements of (iv) and (v) below. The required period in which monitoring must be conducted shall be determined from (i) through (iii) below using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in paragraph (b).
 - (i) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).
 - (ii) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. A permittee shall comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period.
 - (iii) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in (A) and either (B) or (C), as appropriate.
 - (A) The permittee shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.
 - (B) If the percent of leaking connectors calculated from the monitoring results in (A) above is greater than or equal to 0.35 percent of the monitored connectors, the permittee shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to (b)(3), based on the percent of leaking connectors within the total monitored connectors.
 - (C) If the percent of leaking connectors calculated from the monitoring results in (A) is less than 0.35 percent of the monitored connectors, the permittee shall monitor all

connectors that have not yet been monitored within 8 years of the start of the monitoring period.

- (iv) If, during the monitoring conducted pursuant to (a)(3)(i) through (iii), a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.
- (v) The permittee shall keep a record of the start date and end date of each monitoring period under this section for each process unit.
- (b) For use in determining the monitoring frequency, as specified in (a)(3), the percent leaking connectors as used in (a)(3) shall be calculated by using the following equation:

$$%C_L = C_L / C_t * 100$$

Where:

 $%C_L$ = Percent of leaking connectors as determined through periodic monitoring required in (a) and (b)(3)(i) through (iii).

 C_L = Number of connectors measured at 500 ppm or greater, by the method specified in 40 CFR 60.485a(b).

 C_t = Total number of monitored connectors in the process unit or affected facility.

- (c) When a leak is detected pursuant to (a), it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.
- (d) Any connector that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of (b) if:
 - (1) The permittee demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with (a); and
 - (2) The permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in (c) if a leak is detected.
- (e) For inaccessible, ceramic, or ceramic-lined connectors the permittee shall comply with the following:
 - (1) Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring

requirements of (a), from the leak repair requirements of (c), and from the recordkeeping and reporting requirements of 40 CFR 63.1138 and 63.1139. An inaccessible connector is one that meets any of the provisions specified in (i) through (vi), as applicable:

- (i) Buried;
- (ii) Insulated in a manner that prevents access to the connector by a monitor probe;
- (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;
- (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;
- (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or
- (vi) 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, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.
- (f) Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of (e), identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated.

(Ref.: 40 CFR 60.482-11a, Subpart VVa)

- 3.44 For the Entire Facility, the permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent instead of Condition 3.39. The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:
 - (a) The permittee shall notify DEQ in accordance with 40 CFR 60.487a(d) (Condition 6.10) if the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard.

- (b) A performance test shall be conducted initially upon designation, annually, and at other times requested by DEQ.
- (c) If a valve leak is detected, it shall be repaired in accordance with Condition 3.44(d) and (e).

Performance tests shall be conducted in the following manner:

- (d) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 40 CFR 60.485a(b).
- (e) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
- (f) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

Permittees who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent, determined as specified in 40 CFR 60.485a(h).

(Ref.: 40 CFR 60.483-1a, Subpart VVa)

- 3.45 For the Entire Facility, the permittee may elect to comply with one of the alternative work practices specified below. The permittee must notify DEQ in accordance with 40 CFR 60.487a(d)(Condition 6.10) before implementing one of the alternative work practices.
 - (a) The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in Condition 3.39.
 - (b) After two (2) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip one (1) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
 - (c) After five (5) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip three (3) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
 - (d) If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 40 CFR 60.482-7a but can again elect to use this condition.
 - (e) The percent of valves leaking shall be determined as specified in 40 CFR 60.485a(h).
 - (f) The permittee must keep a record of the percent of valves found leaking during each leak detection period.

(Ref.: 40 CFR 60.483-2a, Subpart VVa)

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SECTION 4

WORK PRACTICES

<u>THIS SECTION WAS INTENTIONALLY LEFT BLANK SINCE NO WORK PRACTICE</u> <u>STANDARDS APPLY TO THIS PERMIT ACTION</u>

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SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Monitoring/Recordkeeping Requirement |
|----------------------------|----------------------------------------------|------------------------|-------------------------|--------------------------------------------------------------------------------|
| Facility- Wide | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.1 | Recordkeeping | Maintain records for a minimum of 5 years. |
| | 11 Miss. Admin. Code Pt. 2, R. | 5.2 | Recordkeeping | Record VOC and HAP emissions monthly |
| | 2.2.B(11). | 5.3 | | Maintain records of monthly VOC and HAP emissions |
| AD-102 AD-512 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 5.4 | Pressure Drop | Measure pressure drop across the scrubbers daily. |
| AD-502 | 40 CFR 60.48c(g)(3), Subpart Dc | 5.5 | Fuel Consumption | Maintain records of fuel delivered to the property during each calendar month. |
| AD-504 AD-505 AD-506 | 40 CFR 63.6625(h), Subpart ZZZZ | 5.6 | НАР | Minimize the engine's time spent at idle |
| AD-500 AD-507 | 40 CFR 63.6655(a), Subpart ZZZZ | 5.7 | | Recordkeeping |
| | 40 CFR 63.6655(e), Subpart ZZZZ | 5.8 | | |
| | 40 CFR 63.6655(f), Subpart ZZZZ | 5.9 | | |
| AD-511 | 40 CFR 60.4214(b), Subpart IIII | 5.10 | Hours of Operation | Record hours of operation through non- resettable hour meter |
| AT-321 | 40 CFR 60.113b(c), Subpart Kb | 5.11 | VOC | Control device recordkeeping |
| | 40 CFR 60.115b(c), Subpart Kb | 5.12 | | Closed vent system recordkeeping |
| Facility Wide | 40 CFR 60.482-10a(j), Subpart VVa | 5.13 | VOC | Recordkeeping |
| | 40 CFR 60.485a, Subpart VVa | 5.14 | | Performance test requirements |
| , | 40 CFR 60.486a(a)(2) and (3), Subpart VVa | 5.15 | | Recordkeeping |
| | 40 CFR 60.486a(b), Subpart VVa | 5.16 | | Leak requirements |
| | 40 CFR 60.486a(c), Subpart VVa | 5.17 | | Leak recordkeeping |
| | 40 CFR 60.486a(d), Subpart VVa | 5.18 | | Design recordkeeping |
| | 40 CFR 60.486a(e), Subpart VVa | 5.19 | | Equipment recordkeeping |

| Emission Point | Applicable Requirement | Condition Number(s) | Parameter | Monitoring/Recordkeeping Requirement |
|-------------------|-------------------------------------------|------------------------|-----------|--------------------------------------------------------------------------------------|
| Facility Wide | 40 CFR 60.486a(f), Subpart VVa | 5.20 | VOC | Valve, pump, and connector recordkeeping |
| Facility Wide | 40 CFR 60.486a(g), Subpart VVa | 5.21 | VOC | Alternative valve recordkeeping |
| Wide | 40 CFR 60.486a(h), Subpart VVa | 5.22 | | Log keeping requirements |
| | 40 CFR 60.486a(i), Subpart VVa | 5.23 | | Log keeping exemptions |
| | 40 CFR 60.486a(j), Subpart VVa | 5.24 | | Equipment not in VOC service recordkeeping |
| AD-102 AD-512 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 5.25 | VOC | Stack Testing for VOC control efficiency using EPA Method 25A, 40 CFR 60, Appendix A |

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

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

5.2 For the entire facility, the permittee shall determine VOC, individual and total HAP emissions monthly and for each 12-month rolling total using mass balance, available emission factors, and other documented emission calculation methods.

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

5.3 For the entire facility, the permittee shall maintain sufficient records to document the monthly and 12-month rolling total of VOC and HAP emissions. The permittee shall keep all supporting documentation and/or calculations used to generate the records required by this condition including but not limited to purchase orders, lab results, strip charts, logbooks, etc

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

5.4 For Emission Points AD-102 and AD-512, the permittee shall install, maintain, and operate pressure transducers to measure the pressure drop across the scrubbers. The pressure transducers shall be maintained calibrated in accordance to the manufacturer's specification. The pressure drop shall be maintained within the range recommended by the manufacturer, or as otherwise determined through testing to provide effective control of

VOCs. The pressure drop range and basis for the range shall be recorded, and the actual pressure drop across the scrubbers will be recorded at least daily.

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

5.5 For Emission Point AD-502, the permittee shall maintain records of the amount of natural gas delivered to the property during each calendar month.

(Ref.: 40 CFR 60.48c(g)(3), Subpart Dc)

5.6 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall minimize the engine's time spent at idle during startup and minimize the 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(h), Subpart ZZZZ)

- 5.7 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall keep the following records:
 - (a) A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.11(b)(2)(xiv).
 - (b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - (c) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 3.13(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.6655(a), Subpart ZZZZ)

5.8 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

(Ref.: 40 CFR 63.6655(e), Subpart ZZZZ)

5.9 For Emission Points AD-504, AD-505, AD-506, and AD-507, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency

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operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

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

5.10 For Emission Point AD-511, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 60.4214(b), Subpart IIII)

5.11 For Emission Point AT-321, the permittee is exempt from 40 CFR 60.8 and shall meet the following requirements: Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the DEQ in accordance with Condition 6.7 unless the plan was modified by the DEQ during the review process. In this case, the modified plan applies.

(Ref.: 40 CFR 60.113b(c)(2), Subpart Kb)

- 5.12 For Emission Point AT-321, after installing control equipment in accordance with 40 CFR 60.112b(a)(3) (closed vent system and control device other than a flare), the permittee shall keep the following records.
 - (a) A copy of the operating plan.
 - (b) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2).

The permittee shall keep copies of all reports and records, except for the record required by (a), for at least 2 years. The record required by (a) will be kept for the life of the control equipment.

(Ref.: 40 CFR 60.115b(c), Subpart Kb)

- 5.13 For the Entire Facility, the permittee shall record the information specified in paragraphs (a) through (e) of this section.
 - (a) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
 - (b Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
 - (c) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c).

- (d) For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (e) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(Ref.: 40 CFR 60.482-10a(j), Subpart VVa)

5.14 For the Entire Facility, in conducting the performance tests required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in 40 CFR 60.485a. The permittee shall determine compliance with the standards in 40 CFR 60.482-1a through 60.482-11a, 60.483, and 60.484a by using the methods specified in 40 CFR 60.485a(b).

(Ref.: 40 CFR 60.485a, Subpart VVa)

- 5.15 For the Entire Facility, the permittee may comply with the recordkeeping requirements in one recordkeeping system if the system identifies each record. Also, the permittee shall record the following information for each monitoring event required by 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a:
 - (a) Monitoring instrument identification.
 - (b) Operator identification.
 - (c) Equipment identification.
 - (d) Date of monitoring.
 - (e) Instrument reading.

(Ref.: 40 CFR 60.486a(a)(2) and (3), Subpart VVa)

- 5.16 For the Entire Facility, when each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply:
 - (a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (b) The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in 60.482-7a(c) and no leak has been detected during those two (2) months.
 - (c) The identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482-11a(b)(3) and no leak has been detected during that monitoring.

(d) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(Ref.: 40 CFR 60.486a(b), Subpart VVa)

- 5.17 For the Entire Facility, when a leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location:
 - (a) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
 - (b) The date the leak was detected and the dates of each attempt to repair the leak.
 - (c) Repair methods applied in each attempt to repair the leak.
 - (d) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR Part 60, at the time the leak is successfully repaired or determined to be non-repairable, except when a pump is repaired by elimination indications of liquids dripping.
 - (e) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - (g) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - (h) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (i) The date of successful repair of the leak.

(Ref.: 40 CFR 60.486a(c), Subpart VVa)

- 5.18 For the Entire Facility, the following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location:
 - (a) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (b) The dates and descriptions of any changes in the design specifications.
 - (c) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(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.
 - (d) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed.

(e) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.

(Ref.: 40 CFR 60.486a(d), Subpart VVa)

- 5.19 For the Entire Facility, the following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location:
 - (a) A list of identification numbers for equipment subject to the requirements of 40 CFR Subpart VVa.
 - (b) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).
 - (c) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), 60.482-3a(i), or 60.482-7a(f) shall be signed by the owner or operator.
 - (d) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4a.
 - (e) The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).
 - (1) The background level measured during each compliance test.
 - (2) The maximum instrument reading measured at the equipment during each compliance test.
 - (f) A list of identification numbers for equipment in vacuum service.
 - (g) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR 60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
 - (h) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
 - (i) Records of the information specified in paragraphs (1) through (6) below, for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR Part 60 and 40 CFR 60.485a(b).
 - (1) Date of calibration and initials of operator performing the calibration.
 - (2) Calibration gas cylinder identification, certification date, and certified concentration.
 - (3) Instrument scale(s) used.

- (4) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR Part 60.
- (5) Results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., instrument reading for calibration at the end of monitoring day and the calculated percent difference from the initial calibration value.)
- (6) If a permittee makes their own calibration gas, a description of the procedure used.
- (j) The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11a(b)(3)(v).
- (k) Records of each release from a pressure relief device subject to 40 CFR 60.482-4a.

(Ref.: 40 CFR 60.486a(e), Subpart VVa)

- 5.20 For the Entire Facility, the following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2a(g), and all connectors subject to the requirements of 40 CFR 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location:
 - (a) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, and explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.
 - (b) A list of identification numbers for valves that are designated as difficult-tomonitor, an explanation for each valve stating why the valve is difficult-tomonitor, and the schedule for monitoring each valve.

(Ref.: 40 CFR 60.486a(f), Subpart VVa)

- 5.21 For the Entire Facility, the following information shall be recorded for valves complying with 40.483-2a:
 - (a) A schedule of monitoring.
 - (b) The percent of valves found leaking during each monitoring period.

(Ref.: 40 CFR 60.486a(g), Subpart VVa)

- 5.22 For the Entire Facility, the following information shall be recorded in a log that is kept in a readily accessible location:
 - (a) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
 - (b) Any changes to this criterion and the reasons for the changes.

(Ref.: 40 CFR 60.486a(h), Subpart VVa)

- 5.23 For the Entire Facility, the following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d):
 - (a) An analysis demonstrating the design capacity of the affected facility,
 - (b) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
 - (c) An analysis demonstrating that equipment is not in VOC service.

(Ref.: 40 CFR 60.486a(i), Subpart VVa)

5.24 For the Entire Facility, the information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(Ref.: 40 CFR 60.486a(j), Subpart VVa)

5.25 For Emission Points AD-102 and AD-512, the permittee shall perform an initial stack test within one year of permit issuance to determine control efficiency of the scrubbers for VOCS using EPA Test Method 25A, 40 CFR 60, Appendix A or an alternative EPA approved test method. Subsequent stack testing shall be performed every 5 years not to exceed 61 months of previous stack test.

SECTION 6 REPORTING REQUIREMENTS

| Emission Point | Applicable Requirement | Condition Number(s) | Reporting Requirement | |
|------------------------------------------------|-------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|--|
| Facility- Wide | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.1 | Report permit deviations within five (5) working days. | |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.2 | Submit certified semi-annual monitoring report. | |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.3 | All documents submitted to DEQ shall be certified by a Responsible Official. | |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.4 | Semi-annual VOC and HAP Emissions | |
| AD-102 AD-512 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.5 | Semi-annual Report of Pressure Drop across the Scrubbers | |
| AD-500 AD-502 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.6 | Semi-annual Report of Fuel Combusted | |
| AT-321 | 40 CFR 60.113b(c), Subpart Kb | 6.7 | Reporting for NSPS Kb | |
| AD-504 AD-505 AD-506 AD-507 AD-511 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.8 | Semi-annual Report of Hours of Operation | |
| Facility Wide | 40 CFR 60.487a(a), (b), and (c), Subpart VVa | 6.9 | Semi-annual Reporting for NSPS VVa | |
| AD-102 AD-512 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.10 | Stack Test Protocols | |
| 710-312 | | 6.11 | Submit stack test results within sixty (60) days of conducting respective stack test | |

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

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

6.2 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. This report shall address any required monitoring specified in the permit. All instances of deviations from permit requirements must be clearly identified in the report. Where no monitoring

data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.

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

6.3 Any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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

6.4 For the Entire Facility, the permittee shall submit semi-annual compliance reports in accordance with Condition 6.2 of the VOC and HAP emissions for each calendar month and each consecutive 12-month period as specified in Conditions 5.2 and 5.3.

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

6.5 For Emission Points AD-102 and AD-512, the permittee shall submit a semi-annual compliance report in accordance with Condition 6.2 of the pressure drop deviations across the scrubbers as specified in Condition 5.4.

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

6.6 For Emission Points AD-502, the permittee shall submit a semi-annual compliance report summarizing the amount of natural gas delivered during each calendar month, in accordance with Condition 5.5.

- 6.7 For Emission Point AT-321, the permittee shall submit for approval by the DEQ as an attachment to the notification required by 40 CFR 60.7(a)(1) or, if the facility is exempt from 40 CFR 60.7(a)(1), as an attachment to the notification required by 40 CFR 60.7(a)(2), an operating plan containing the information listed below.
 - (a) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement,

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- documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.
- (b) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(Ref.: 40 CFR 60.113b(c), Subpart Kb)

6.8 For Emission Points AD-504, AD-505, AD-506, AD-507, and AD-511, the permittee shall submit semi-annual reports, in accordance with Condition 6.2, of the hours of operation recorded through the non-resettable hour meter. The report shall detail 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.

- 6.9 For the Entire Facility, the permittee shall comply with the following reporting requirements:
 - (a) Submit semiannual reports postmarked no later than January 31st and July 31st for the previous 6 month period to DEQ beginning 6 months after the initial startup date.
 - (b) The initial semiannual report shall include the following information:
 - (1) Process unit identification.
 - (2) Number of valves subject to the requirements of 40 CFR 60.482-7a, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7a(f).
 - (3) Number of pumps subject to the requirements of 40 CFR 60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e) and those pumps complying with 40 CFR 60.482-2a(f).
 - (4) Number of compressors subject to the requirements of 40 CFR 60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR 60.482-3a(i) and those compressors complying with 40 CFR 60.482-3a(h)
 - (4) Number of connectors subject to the requirements of 40 CFR 60.482-11a.
 - (c) All semiannual reports shall include the following information, summarized from the information in 40 CFR 60.486a:
 - (1) Process unit identification.
 - (2) For each month during the semiannual reporting period,

- (i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7a(b) or 40 CFR 60.483-2a,
- (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1),
- (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
- (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6),
- (v) Number of connectors for which leaks were detected as described in 40 CFR 60.482-11a(b)
- (vi) Number of connectors for which leaks were not repaired as required in 40 CFR 60.482-11a(d), and
- (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to 40 CFR Part 60.487a(b) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) If electing to comply with the provisions of 40 CFR 60.483-1a or 60.483-2a shall notify the DEQ of the alternative standard selected 90 days before implementing either of the provisions.
- (e) The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee shall notify the DEQ of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(Ref.: 40 CFR 60.487a, Subpart VVa)

6.10 For Emission Points AD-102 and AD-512, the permittee shall submit a stack test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. If the initial stack test protocol is acceptable, subsequent test protocols may be waived if these protocols contain no significant changes. Also, the DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be schedules to witness the test(s).

6.11 For Emission Points AD-102 and AD-512, the permittee shall submit a report of any stack test results within sixty (60) days of conducting the respective stack test.