STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Ergon Refining Inc 2125 Haining Road Vicksburg, Mississippi Warren County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: August 16, 2016 Modified: January 5, 2017

Modified:

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: July 31, 2021 Permit No.: 2780-00003

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

OTHER IMPORTANT DOCUMENTS:

40 CFR 60, SUBPART Dc – NEW SOURCE PERFORMANCE STANDARDS FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

40 CFR 60, SUBPART J -- STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES

40 CFR 60, SUBPART QQQ – NEW SOURCE PERFORAMANCE STANDARD FOR VOC EMISSIONS FROM PETROLEUM REFINERY WASTEWATER SYSTEMS

40 CFR 60, SUBPART Kb – NEW SOURCE PERFORMANCE STANDARD FOR LIQUID STORAGE VESSELS (INCLUDING PETROLEUM LIQUID STORAGE VESSELS) FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER JULY 23, 1984

40 CFR 60, SUBPART Ka – NEW SOURCE PERFORMANCE STANDARD FOR PETROLEUM LIQUIDS FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER MAY 18, 1978, AND PRIOR TO JULY 23, 1984

40 CFR 61, SUBPART FF – NATIONAL EMISSION STANDARD FOR BENZENE WASTE OPERATIONS

40 CFR 60, SUBPART GGG – NEW SOURCE PERFORMANCE STANDARD FOR EQUIPMENT LEAKS OF VOC IN PETROLEUM REFINERIES FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER JANUARY 4, 1983, AND ON OR BEFORE NOVEMBER 6, 2006

40 CFR 60, SUBPART VV – NEW SOURCE PERFORMANCE STANDARDS FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICALS MANUFACTURING INDUSTRY

40 CFR 60, SUBPART UU – NEW SOURCE PERFORMANCE STANDARD FOR ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE

40 CFR 60, SUBPART GG – NEW SOURCE PERFORMANCE STANDARD FOR STATIONARY GAS TURBINES

40 CFR 60, SUBPART IIII – NEW SOURCE PERFORMANCE STANDARD FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES

40 CFR 63, SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

40 CFR 63, SUBPART JJJJJJ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AREA SOURCES: INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS

40 CFR 60, SUBPART Ja – STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER MAY 14, 2007

SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)
- 1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)
- 1.4 (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
 - (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit

is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

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

- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)
- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)
 - (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the

permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

- (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)
- (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)
- No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
- Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)
- Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)
- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit

application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
 - (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)
- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)
- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or

change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; 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 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."
- 1.21 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)
- 1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.
 - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
 - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
 - (d) In any enforcement proceeding, the permittee seeking to establish the occurrence

of an emergency has the burden of proof.

- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)
- Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.
 - (a) Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)
 - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee 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.
 - (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
 - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:

- (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
- (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
- (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
- (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
 - (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.

- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description			
AA-000	Fugitive Emissions from Facility-wide Process Unit and Compressor Equipment including pumps, valves, pressure relief devices, and connectors in VOC service			
AA-014	14.46 MMBTU/hr Natural Gas and Refinery Fuel Gas fired reactor charge heater (B-651)			
AA-016	16.8 MMBTU/hr Natural Gas fired steam boiler equipped with low NOx burners (B-1)			
AA-017	16.8 MMBTU/hr Natural Gas fired refinery steam boiler (B-2)			
AA-018R (Upon certification of construction)	51.89 MMBTU/hr Natural Gas and Refinery Fuel Gas fired atmospheric crude oil heater equipped with low NOx burners (H-1R) – Constructed in 2016.			
AA-019	45 MMBTU/hr Natural Gas and Refinery Fuel Gas fired vacuum tower heater equipped with low NOx burners (H-3)			
AA-022	54 MMBTU/hr Natural Gas and Refinery Fuel Gas fired hydrogen gas plant heater equipped with low NOx burners (H-451)			
AA-024	0.35 MMBTU/hr Natural Gas and Refinery Fuel Gas fired emergency flare (FL-2)			
AA-025	31.73 MMBTU/hr Diesel emergency generator subject to RICE (>500 hp manufactured prior to 1993)			
AA-026	Wastewater Treatment System which includes waste water treatment process, drains, and oil-water separator tank with carbon canisters.			
AA-034	Refinery Barge Loading Dock (BL-3)			
AA-043	95.8 MMBTU/hr Natural Gas fired Cogeneration Unit turbine generator with heat recovery boiler			
AA-048	Refinery Truck Loading Stations			
AA-049	15.5 MMBTU/hr Natural Gas fired asphalt hot oil heater (H-6)			
AA-050	1.5 MMBTU/hr Natural Gas fired Hot Oil Heater (H-HO1) (This heater is an insignificant activity and listed for completeness purposes only.)			
AA-202	27.6 MMBTU/hr Natural Gas and Refinery Fuel Gas fired hydrogen gas plant heater (H-401)			
AA-208	16.6 MMBTU/hr Natural Gas and Refinery Fuel Gas fired reactor charge heater (B-653)			
AA-209	17.3 MMBTU/hr Natural Gas HPU Reactor Charge Heater (B-655)			
AB-001	8.37 MMBTU/hr Natural Gas Cleaver Brooks steam boiler (CB-266-400)			
AB-002	16.74 MMBTU/hr Natural Gas Cleaver Brooks steam boiler (CB-266-400)			
AD-002 AD-003	Terminal Truck Loading Racks (LR-2 & LR-3)			

Emission Point	Description
AD-004 AD-005	Barge Docks (BL-1 & BL-2)
AD-007	Railcar Loading Rack (RL-1)
AG-001	1214 hp Emergency Generator 2 constructed on 8/21/2008 with a displacement of <30 liters/cylinder
AG-002	302 hp Emergency Generator 3 constructed on 8/21/2008 with a displacement of <30 liters/cylinder
AG-003	373 hp Firewater Pump Engine constructed in 2009
AG-004	373 hp Firewater Pump Engine constructed in 2009
AH-016	61.12 MMBTU/hr natural gas fired hot oil furnace associated with the Propane Deasphalting (PDA) Unit equipped with next generation ultra low NOx burner.
AH-017a	16.2 MMBTU/hr natural gas fired unit heater associated with the Hydrogen Processing Unit equipped with next generation ultra low NOx burner.
AH-017 b	13.11 MMBTU/hr natural gas fired unit heater associated with the Hydrogen Processing Unit equipped with next generation ultra low NOx burner.
AH-018	73.11 MMBTU/hr natural gas/refinery fuel gas fired heater associated with the hydrogen plant equipped with next generation ultra low NOx burner.
AT-101	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-101)
AT-102	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-102)
AT-103	External Floating Roof 6,300,000 gallon crude oil tank (T-103)
AT-104	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-104)
AT-105	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-105)
AT-106	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-106)
AT-107	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-107)
AT-108	Vertical Fixed Roof 399,000 gallon petroleum liquid tank (T-108)
AT-110	Vertical Fixed Roof 210,000 gallon petroleum liquid tank (T-110)
AT-111	Vertical Fixed Roof 210,000 gallon petroleum liquid tank (T-111)
AT-112	Vertical Fixed Roof 199,500 gallon petroleum liquid tank (T-112)
AT-113	Vertical Fixed Roof 9,400 gallon petroleum liquid tank (T-113)
AT-114	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-114)
AT-115	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-115)

Emission Point	Description
AT-118	Vertical Fixed Roof 3,360,000 gallon crude oil tank (T-118)
AT-119	Vertical Fixed Roof 63,000 gallon petroleum liquid tank (T-119)
AT-120	Vertical Fixed Roof 63,000 gallon petroleum liquid tank (T-120)
AT-121	Vertical Fixed Roof 63,000 gallon petroleum liquid tank (T-121)
AT-124	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-124)
AT-125	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-125)
AT-126	Vertical Fixed Roof 840,000 gallon distillate fuel oil #2 tank (T-126)
AT-127	Vertical Fixed Roof 840,000 gallon distillate fuel oil #2 tank (T-127)
AT-132	Vertical Fixed Roof 756,000 gallon petroleum liquid tank (T-132)
AT-133	Vertical Fixed Roof 756,000 gallon petroleum liquid tank (T-133)
AT-134	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-134)
AT-135	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-135)
AT-136	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-136)
AT-137	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-137)
AT-138	Vertical Fixed Roof 840,000 gallon petroleum liquid tank (T-138)
AT-201	Vertical External Floating Roof 3,360,000 gallon crude oil tank (T-201, formerly AD-001)
AT-202	Vertical External Floating Roof 3,360,000 gallon crude oil tank (T-202, formerly AD-002)
AT-203	Vertical Internal Floating Roof 210,000 gallon off spec crude oil tank (T-203, formerly AA-035)
AT-204	Vertical Fixed Roof 197,610 gallon distillate fuel oil #2 tank (T-204)
AT-205	Vertical Internal Floating Roof 210,000 gallon off spec crude oil tank (T-205, formerly AD-003)
AT-206	Vertical External Floating Roof 3,360,000 gallon crude oil tank (T-206, formerly AD-004)
AT-207	Vertical Fixed Roof 2,792,414 gallon asphalt tank (T-207, formerly AA-036)
AT-208	Vertical Fixed Roof 203,773 gallon distillate fuel oil #2 tank (T-208, formerly AC-002)
AT-209	Vertical Fixed Roof 203,773 gallon asphalt feedstock tank (T-209, formerly AC-003)
AT-212	Vertical Fixed Roof 203,773 gallon petroleum liquid tank (T-212, formerly AC-004)
AT-215	Vertical Fixed Roof 414,596 gallon asphalt tank (T-215, formerly AE-001)

Emission Point	Description
AT-216	Vertical Fixed Roof 414,596 gallon asphalt tank (T-216, formerly AE-002)
AT-218	Vertical Fixed Roof 846,115 gallon asphalt tank (T-218, formerly AE-003)
AT-219	Vertical Fixed Roof 846,115 gallon asphalt tank (T-219, formerly AE-004)
AT-220	Vertical Fixed Roof 846,115 gallon asphalt tank (T-220, formerly AE-005)
AT-221	Vertical Fixed Roof 3,384,459 gallon asphalt tank (T-221, formerly AE-006)
AT-222	Vertical Fixed Roof 24,067 gallon petroleum liquid tank tank (T-222, formerly AC-005)
AT-224	Vertical Fixed Roof 420,000 gallon asphalt tank (T-224)
AT-225	Vertical Fixed Roof 420,000 gallon asphalt tank (T-225)
AT-226	Vertical Fixed Roof 2,310,000 gallon asphalt tank (T-226)
AT-227	Vertical Fixed Roof 41,460 gallon distillate fuel oil #2 tank (T-227, formerly AF-001)
AT-228	Vertical Fixed Roof 41,460 gallon distillate fuel oil #2 tank (T-228, formerly AF-002)
AT-229	Vertical Fixed Roof 224,150 gallon asphalt feedstock tank (T-229, formerly AG-001)
AT-230	Vertical Fixed Roof 224,150 gallon asphalt feedstock tank (T-230, formerly AG-002)
AT-232	Vertical Fixed Roof 1,698,105 gallon asphalt feedstock tank (T-232, formerly AG-003)
AT-233	Vertical Fixed Roof 1,698,105 gallon asphalt feedstock tank (T-233, formerly AG-004)
AT-234	Vertical Fixed Roof 1,698,105 gallon asphalt feedstock tank (T-234, formerly AG-005)
AT-235	Vertical Fixed Roof 1,698,105 gallon asphalt feedstock tank (T-235, formerly AG-006)
AT-239	Vertical Internal Floating Roof 84,000 gallon sour water tank (T-239)
AT-240	Vertical Fixed Roof 4,283,456 gallon asphalt feedstock tank (T-240, formerly AA-011)
AT-241	Vertical Fixed Roof 4,283,456 gallon asphalt feedstock tank (T-241, formerly AA-012)
AT-242	Vertical Fixed Roof 5,009,939 gallon asphalt tank (T-242, formerly AA-013)
AT-243	Vertical Internal Floating Roof 42,000 gallon naphtha tank (T-243, formerly AA-027)
AT-244	Vertical External Floating Roof 840,000 gallon naphtha tank (T-244, formerly AA-028)
AT-252	Vertical Internal Floating Roof 52,647 gallon crude oil (recovered from WWTS) tank (T-252, formerly AA-038)
AT-258	Vertical Fixed Roof 3,384,459 gallon asphalt tank (T-258, formerly AA-044)
AT-263	Vertical Fixed Roof 2,310,000 gallon asphalt feedstock tank (T-263, formerly AA-045)

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Emission Point	Description
AT-264	Vertical Fixed Roof 2,310,000 gallon asphalt feedstock tank (T-264, formerly AA-046)
AT-265	Vertical Fixed Floating Roof 2,310,000 gallon naphtha tank (T-265, formerly AA-047)
AT-271	Vertical Fixed Roof 840,000 gallon asphalt feedstock tank (T-271)
AT-272	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-272)
AT-273	Vertical Fixed Roof 2,310,000 gallon petroleum liquid tank (T-273)
AT-274	Vertical Fixed Roof 4,032,000 gallon asphalt storage tank (T-274)
AT-301	Vertical Fixed Roof 41,460 gallon asphalt tank (T-301, formerly AE-011)
AT-302	Vertical Fixed Roof 18,803 gallon asphalt tank (T-302, formerly AE-012)
AT-351	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-351, formerly AB-005)
AT-352	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-352, formerly AB-006)
AT-353	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-353, formerly AB-007)
AT-354	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-354, formerly AB-008)
AT-355	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-355, formerly AB-009)
AT-356	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-356, formerly AB-010)
AT-357	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-357, formerly AB-011)
AT-358	Vertical Fixed Roof 52,647 gallon polymer modified asphalt tank (T-358, formerly AB-012)
AV-350	Vertical Fixed Roof 5,711 gallon polymer modified asphalt tank (V-350, formerly AB-002)
AV-351	Vertical Fixed Roof 5,711 gallon polymer modified asphalt tank (V-351, formerly AB-003)
BB-001	Ammonia vent associated with the sour water stripper.
BB-002	Cooling Tower Emissions – Fugitive emissions associated with the North and South cooling towers

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. <u>Facility-Wide Emission Limitations & Standards</u>

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
 - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)
- 3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AT-111 AT-112 AT-207 AT-215 AT-216 AT-218	40 CFR Subpart UU (New Source Performance Standard for Asphalt Processing and Asphalt Roofing Manufacture) 40 CFR 60.470	3.B.1		Applicability
A1-218 through AT-221 AT-224 through AT-226 AT-242 AT-258 AT- 274AT-301 AT-302 AT-351 through AT-358 AV-350 AV-351	40 CFR 60.472(c), Subpart UU	3.B.2	Opacity	0%
AT-243 AT-244 AT-252 AT-265	40 CFR 60, Subpart Kb (New Source Performance Standard 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	3.B.3	VOC	Applicability
AT-243 AT-252 AT-265	40 CFR 60.112b(a), Subpart Kb	3.B.4	VOC	Install a fixed roof in combination with an internal floating roof
AT-201 AT-202 AT-203 AT-205 AT-206 AT-209 AT-212	40 CFR 60, Subpart Ka (Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification commenced after May 18, 1978, and Prior to July 23, 1984) 40 CFR 60.110a	3.B.5	VOC	Applicability
AT-201 AT-202 AT-206	40 CFR 60.112a(a)(1), Subpart Ka	3.B.6	VOC	Install an external floating roof

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AT-203 AT-205	40 CFR 60.112a(a)(2), Subpart Ka	3.B.7	VOC	Install a fixed roof with an internal floating type cover
AA-014 AA-016 AA-017 AA-018R AA-019 AA-022	11 Miss. Admin. Code Pt. 2, R. 1.3.(D)(1)(b).	3.B.8	PM	E = 0.8808 *I -0.1667
AA-024 AA-025 AA-043 AA-049 AA-202 AA-208 AA-209 AB-001 AB-002 AH-016 AH-017a AH-017b	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.9	SO ₂	4.8 lbs/MMBTU
AA-024 AB-001	11 Miss. Admin. Code Pt. 2, R. 1.3.(D)(1)(b).	3.B.10	PM	0.6 lbs/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.9	SO ₂	4.8 lbs/MMBTU
AA-014 AA-019 AA-022 AA-024 AA-049 AA-202 AA-208 AH-018	Federally Enforceable Construction Permit issued September 19, 2011 40 CFR 60, Subpart J (Standards of Performance for Petroleum Refineries) 40 CFR 60.100	3.B.11	H ₂ S	Applicability
	40 CFR 60.104(a)(1), Subpart J	3.B.12	Fuel H ₂ S Content	230 mg/dscm (0.10 gr/dscf)
AA-014 AA-019 AA-022 AA-024 AA-202 AA-208	Construction Permit Issued on June 8, 1993	3.B.13	Fuel Restriction	The permittee shall burn only natural gas or refinery fuel gas.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-019	Federally Enforceable Construction Permit issued September 19, 2011 and	3.B.14	NOx	0.06 lb/MMBTU, 3-hour averaging period. Emission limit of 0.06 lb/MMBTU applies when AA-019 operates without air pre-heat. When AA-019 operates with air pre-heat, emissions shall not exceed 0.065 lb/MMBTU, 3-hour averaging period.
AA-022	Federally Enforceable Construction Permit issued September 19, 2011	3.B.15	NOx	0.025 lb/MMBTU, 3-hour averaging period
AA-016 AA-017 AA-049 AB-001 AB-002	40 CFR 60, Subpart Dc (New Source Performance Standard for Small Industrial- Commercial-Institutional Steam Generating Units) 40 CFR 60.42c	3.B.16	SO ₂	NSPS applicability only
AA-016 AA-017 AB-001 AB-002	Construction Permit Issued on June 8, 1993	3.B.17	Fuel Sulfur Content	The permittee shall burn only natural gas
AA-049	40 CFR 60.42c, Subpar Dc			
AA-043	40 CFR 60, Subpart GG (New Source Performance Standard for Stationary Gas Turbines) 40 CFR 60.330	3.B.18	NOx/SO ₂	Applicability
	Construction Permit Issued on July 26, 1994 and 40 CFR 60.333(b), Subpart GG	3.B.19	Fuel Restriction	The permittee shall burn only natural gas as a fuel with a sulfur content less than or equal to 0.8% by weight.
	40 CFR 60.332(c) and 63.332(a)(2), Subpart GG	3.B.20	NOx	STD=0.0150 ((14.4)/Y) + F
AA-025 AG-001 AG-002 AG-003 AG-004	Title V Permit Renewal issued September 8, 2006, Title V Permit Modification issued December 21, 2009, and Title V Permit Renewal issued October 4, 2011.	3.B.21	Hours of Operation	<500 hours (each) per year on a 365 day rolling basis
AA-026	40 CFR 61, Subpart FF (National Emission Standard for Benzene Waste Operations)	3.B.22	Benzene	No controls required, since TAB is less than 10 Mg/yr

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	40 CFR 61.348(a)(1)(i)			
AA-026	Federally Enforceable Construction Permit issued September 19, 2011 40 CFR 60, Subpart QQQ (New Source Performance Standard for VOC Emissions from Petroleum Refinery Wastewater Systems) 40 CFR 60.690	3.B.23	VOC	Applicability
	40 CFR 60.692-2(a), Subpart QQQ	3.B.24		Standards for Individual Drain Systems
	40 CFR 60.692-2(b), Subpart QQQ	3.B.25		
	40 CFR 60.692-2(c), Subpart QQQ	3.B.26		
	40 CFR 60.692-3(a)	3.B.27		Standards for Oil-Water Seperators
	40 CFR 60.692-5(b), Subpart QQQ	3.B.28		Standards for Closed Vent Systems and Control Devices: Vapor recovery system shall operate at 95% or greater efficiency.
BB-001	Title V Permit modified January 5, 2017	3.B.29	Ammonia	The permittee shall not exceed 903.0 tons per year and 4.0 tons per day.
AA-000	Federally Enforceable Construction Permit issued September 19, 2011 40 CFR 60, Subpart GGG (New Source Performance Standards for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification commenced after January 4, 1983, and on or before November 6, 2006) 40 CFR 60, Subpart VV (New Source Standard for Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry)	3.B.30	VOC	Subpart GGG standards require compliance with Subpart VV standards
	40 CFR 60.482-2, Subpart VV	3.B.32		Standards: Pumps in light liquid service

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	40 CFR 60.482-3, Subpart VV	3.B.33		Standards: Compressors
	40 CFR 60.482-4, Subpart VV	3.B.34		Standards: Pressure relief devices in gas/vapor service
AA-000	40 CFR 60.482-5, Subpart VV	3.B.35	VOC	Standards: Sampling connection systems
	40 CFR 60.482-6, Subpart VV	3.B.36		Standards: Open-ended valves or lines
	40 CFR 60.482-7, Subpart VV	3.B.37		Standards: Valves in gas/vapor service and in light liquid service
	40 CFR 60.482-8, Subpart VV	3.B.38		Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors
	40 CFR 60.482-9, Subpart VV	3.B.39		Standards: Delay of repair
	40 CFR 60.482-10, Subpart VV	3.B.40		Standards: Closed vent systems and control devices
Facility Wide	Federally Enforceable Construction Permit issued September 19, 2011	3.B.41	Fuel Restriction	The permittee shall not burn any liquid fossil fuel with sulfur content greater than 0.05% by weight except during periods of natural gas curtailment and during periods of DOT required maintenance of the natural gas pipeline during which the facility, as applicable, shall burn only LPG or low sulfur distillate (e.g. No. 2 oil less than 0.5% sulfur).
AG-001 AG-002 AG-003 AG-004	40 CFR 60, Subpart IIII (New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines)	3.B.42	NMHC + NOx CO PM SO ₂	Applicability
AG-001 AG-002	40 CFR 60.4205(b), Subpart IIII	3.B.43		The permittee shall comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants.
AG-003 AG-004	40 CFR 60.4205(c), Subpart IIII	3.B.44		The permittee shall comply with the emission standards in Table 4: NMHC + NOx ≤7.8 g/HP-hr CO ≤ 2.6 g/HP-hr
AG-001 AG-002 AG-003 AG-004	40 CFR 60.4207(b), Subpart IIII	3.B.45	Fuel Restriction	PM ≤ 0.40 g/HP-hr The permittee shall use diesel fuel that meets in the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-025	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)	3.B.46	НАР	Applicability
	40 CFR 63.6603(a) and Table 2d, Subpart ZZZZ	3.B.47	Maintenance Requirements	Change oil and filter every 500 hours of operation or annually; inspect air cleaner every 1,000 hours of operation or annually; and inspect all hoses and belts every 500 hours of operation or annually.
AA-018R	Title V Operating Permit issued January 5, 2017	3.B.48	Fuel Restriction	The permittee shall only burn natural gas or refinery fuel gas.
AA-018R	40 CFR 60.100a(a), Subpart Ja (Standards for Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007)	3.B.49	H ₂ S NOx	Applicability
	40 CFR 60.102a(g)(1)(ii), Subaprt Ja	3.B.50	H ₂ S	< 162 ppmv – 3-hour rolling average basis and < 60 ppmv 365 successive calendar day rolling average basis.
	40 CFR 60.102a(g)(2)(i)(A) and (B), Subpart Ja	3.B.51	NOx	< 40 ppmv (dry basis, corrected to 0% excess air) – 30 day rolling average basis or <0.040 lbs/MMBTU – 30-day rolling average basis
AT-244	40 CFR 60.112b(a)(2), Subpart Kb	3.B.52	VOC	Install External Floating Roof

3.B.1 For Emission Points AT-111, AT-112, AT-207, AT-215, AT-216, AT-218 through AT-221, AT-224 through AT-226, AT-242, AT-258, AT-274, AT-301, AT-302, AT-351 through AT-358, AV-350, and AV-351, the permittee is subject to and shall comply with the New Source Performance Standard for Asphalt Processing and Asphalt Roofing Manufacture and the applicable General Provisions (40 CFR 60, Subparts UU and A).

(Ref.: 40 CFR 60.470, Subpart UU)

3.B.2 For Emission Points AT-111, AT-112, AT-207, AT-215, AT-216, AT-218 through AT-221, AT-224 through AT-226, AT-242, AT-258, AT-274, AT-301, AT-302, AT-351 through AT-358, AV-350, and AV-351, the permittee shall not cause to be discharged into the atmosphere from any asphalt storage tank, exhaust gases with opacity greater than zero (0) percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning.

(Ref.: 40 CFR 60.472(c), Subpart UU)

3.B.3 For Emission Points, AT-243, AT-244, AT-252, and AT-265, the permittee is subject to the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 and the applicable General Provisions (40 CFR 60, Subparts Kb and A)

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

3.B.4 For Emission Points AT-243, AT-252, and AT-256, the permittee shall install a fixed roof in combination with an internal floating roof meeting the specifications listed in 40 CFR 60.112b(a)(1)(i) – (ix).

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

3.B.5 For Emission Points AT-201, AT-202, AT-203, AT-205, AT-206, AT-209, and AT-212, the permittee is subject to and shall comply with Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification commenced after May 18, 1978, and Prior to July 23, 1984, and the applicable General Provisions (40 CFR 60, Subparts Ka and A).

(Ref.: 40 CFR 60.110a, Subpart Ka)

3.B.6 For Emission Points AT-201, AT-202, and AT-206, the permittee shall install an external floating roof meeting the specifications listed in 40 CFR 60.112a(a)(1)(i) – (iv).

(Ref.: 40 CFR 61.112a(a)(1), Subpart Ka)

3.B.7 For Emission Points AT-203 and AT-205, the permittee shall install an internal floating roof meeting the specifications listed in 40 CFR 60.112a(a)(2).

(Ref.: 40 CFR 60.112a(a)(2), Subpart Ka)

3.B.8 For Emission Points AA-014, AA-016, AA-017, AA-019, AA-022, AA-025, AA-043, AA-049, AA-202, AA-208, AA-209, AB-002, AB-003, AH-016, AH-017a, AH-017b, and AH-018R, the permittee shall not have particulate emissions that exceed an emission rate as determined by the relationship:

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

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

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

3.B.9 For Emission Points AA-014, AA-016, AA-017, AA-018R, AA-019, AA-022, AA-024, AA-025, AA-043, AA-049, AA-202, AA-208, AA-209, AB-001, AB-002, AB-003, AH-016, AH-017a, AH-017b, and AH-018, the permittee shall not have sulfur dioxide emissions that exceed 4.8 lb/MMBTU heat input.

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

3.B.10 For Emission Points AA-024, and AB-001, the permittee shall not emit ash and/or particulate matter that exceed 0.6 lb/MMBTU per hour heat input.

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

3.B.11 For Emission Points AA-014, AA-019, AA-022, AA-024, AA-049, AA-202, AA-208, and AH-018, the permittee is subject to and shall comply with Standards of Performance for Petroleum Refineries and the applicable General Provisions (40 CFR 60, Subparts J and A)

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011 and 40 CFR 60.100, Subpart J)

3.B.12 For Emission Points AA-014, AA-019, AA-022, AA-024, AA-049, AA-202, AA-208, and AH-018, the permittee shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H₂S) in excess of 230 milligrams per dry standard cub meter (0.10 grains per dry standard cubic foot). The combustion gases generated by the startup, shutdown, or malfunction of a refinery process unit or released to AA-024 (FL-2) as a result of relief valve leakage or other emergency malfunction are exempt from the requirement to comply with 40 CFR 60.104(a)(1).

(Ref.: 40 CFR 60.104(a)(1), Subpart J)

3.B.13 For Emission Points AA-014, AA-019, AA-022, AA-024, AA-202, and AA-208, the permittee shall burn only natural gas or refinery fuel gas.

(Ref.: Construction Permit Issued on June 8, 1993)

3.B.14 For Emission Point AA-019, the permittee shall not have nitrogen oxide emissions to exceed 0.06 lb/MMBTU, 3-hour averaging period, when operating without air pre-heat. When AA-019 operates with air pre-heat, emissions shall not exceed 0.065 lb/MMBTU, 3-hour averaging period.

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011)

3.B.15 For Emission Point AA-022, the permittee shall not have nitrogen oxide emissions to exceed 0.025 lb/MMBTU, 3-hour averaging period.

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011)

3.B.16 For Emission Points AA-016, AA-017, AA-049, AB-001, and AB-002, the permittee is subject to and shall comply with the New Source Performance Standard for Small Industrial-Commercial- Institutional Steam Generating Units and the applicable General Provisions (40 CFR 60, Subparts Dc and A).

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

3.B.17 For Emission Points AA-016, AA-017, AA-049, AB-001, and AB-002, the permittee shall burn only natural gas.

(Ref.: Construction Permit Issued on June 8, 1993)

3.B.18 For Emission Point AA-043, the permittee is subject to and shall comply with the New Source Performance Standard for Stationary Gas Turbines and the applicable General Provisions (40 CFR 60, Subparts GG and A).

3.B.19 For Emission Point AA-043, the permittee shall burn only natural gas as a fuel with a sulfur content less than or equal to 0.8 percent by weight.

(Ref.: Construction Permit Issued July 26, 1994 and 40 CFR 60.333(b), Subpart GG)

3.B.20 For Emission Point AA-043, the permittee shall not cause to be discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the following:

$$STD = 0.0150 ((14.4)/Y) + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NOx emissions allowance for fuel bound nitrogen as defined in 60.332(a)(3)

(Ref.: 40 CFR 60.332(c) and 63.332(a)(2), Subpart GG)

3.B.21 For Emission Point AA-025, AG-001, AG-002, AG-003, and AG-004, the permittee shall limit operation of this equipment to 500 hours per year each on a rolling 365 day basis.

(Ref.: Title V Permit Renewal issued September 8, 2006, Title V Permit Modification issued December 21, 2009, and Title V Permit Renewal issued October 4, 2011)

3.B.22 For Emission Point AA-026, the permittee is subject to and shall comply with the National Emission Standard for Benzene Waste Operations and the applicable General

Provisions (40 CFR 61, Subparts FF and A) This emission point has a total annual benzene (TAB) quantity of less than 10 megagrams per year and is therefore exempted from the requirements of §61.355(b) and §61.355(c).

(Ref.: 40 CFR 61.342(a), Subpart FF)

3.B.23 For Emission Point AA-026, the permittee is subject to and shall comply with New Source Performance Standard for VOC Emissions from Petroleum Refinery Wastewater Systems and the applicable General Provisions (40 CFR 60, Subparts QQQ and A).

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011 and 40 CFR 60.690, Subpart QQQ)

- 3.B.24 For Emission Point AA-026, the permittee shall:
 - (1) Each drain shall be equipped with water seal controls.
 - (2) Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.
 - (3) Except as provided in paragraph (4), each drain out of active service shall be checked by visual or physical inspection initially and weekly thereafter for indications of low water levels or other problems that could result in VOC emissions.
 - (4) As an alternative to the requirements in paragraph (3), if the permittee elects to install a tightly sealed cap or plug over a drain that is out of service, inspections shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed.
 - (5) Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except as provided in §60.692–6.

(Ref.: 40 CFR 60.692-2(a), Subpart QQQ)

- 3.B.25 For Emission Point AA-026, the permittee shall comply with the following:
 - (1) Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.
 - (2) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

- (3) Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.
- (4) If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except as provided in §60.692–6.

(Ref.: 40 CFR 60.692-2(b), Subpart QQQ)

- 3.B.26 For Emission Point AA-026, the permittee shall comply with the following:
 - (1) Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.
 - (2) The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.
 - (3) Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in §60.692–6.

(Ref.: 40 CFR 60.692-2(c), Subpart QQQ)

- 3.B.27 For Emission Point AA-026, each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment shall be equipped and operated with a fixed roof, which meets the following specifications:
 - (1) The fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.
 - (2) The vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.
 - (3) If the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.
 - (4) Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly.

(5) When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after it is identified, except as provided in §60.692–6.

(Ref.: 40 CFR 60.692-3(a), Subpart QQQ)

3.B.28 For Emission Point AA-026, the vapor recovery system shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

(Ref.: 40 CFR 60.692-5(b), Subpart QQQ)

3.B.29 For Emission Point BB-001, the permittee shall not emit ammonia in excess of 903.0 tons per year and 4.0 tons per day.

(Ref.: Title V Permit Modified January 5, 2017)

3.B.30 For Emission Point AA-000, the permittee is subject to and shall comply with New Source Performance Standards (NSPS) for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or before November 7, 2006, and the applicable General Provisions (40 CFR 60, Subparts GGG and A)

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011 and 40 CFR 60.592, Subpart GGG)

3.B.31 For Emission Point AA-000, the permittee shall comply with the requirements of NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or before November 7, 2006 (40 CFR 60, Subpart VV) to meet the requirements of NSPS Subpart GGG.

(Ref.: 40 CFR 60.592, Subpart GGG)

- 3.B.32 For pumps in light liquid service, the permittee shall comply with the following:
 - (a) (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in paragraphs (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 paragraphs (d), (e), and (f).
 - (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - (b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

- (2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either paragraph (b)(2)(i) or (ii). This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.
 - (i) Monitor the pump within 5 days as specified in §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in paragraph (c).
 - (ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection 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 calendar days after it is detected, except as provided in §60.482–9.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (i) and (ii), where practicable.
 - (i) Tightening the packing gland nuts;
 - (ii) Ensuring that the seal flush is operating at design pressure and temperature.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), provided the requirements specified in paragraphs (1) through (6) are met.
 - (1) Each dual mechanical seal system is—
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 - (ii) Equipped with a barrier fluid 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 §60.482–10; or
 - (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

- (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4) (i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
 - (ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B).
 - (A) Monitor the pump within 5 days as specified in §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (B) Designate the visual indications of liquids dripping as a leak.
- (5) (i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.
 - (ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
 - (iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii), a leak is detected.
- (6) (i) When a leak is detected pursuant to paragraph (d)(4)(ii)(A), it shall be repaired as specified in paragraph (c).
 - (ii) A leak detected pursuant to paragraph (d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.
 - (iii) A designated leak pursuant to paragraph (d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.
- (e) Any pump that is designated, as described in §60.486(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), (c), and (d) if the pump:

- (1) Has no externally actuated shaft penetrating the pump housing,
- (2) 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 §60.485(c), and
- (3) Is tested for compliance with paragraph (2) initially upon designation, annually, and at other times requested by the Administrator.
- (f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e).
- (g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) if:
 - (1) 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); and
 - (2) 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) if a leak is detected.

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

- 3.B.33 For compressors, the permittee shall comply with the following:
 - (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 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 §60.482–10; 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) (1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.
 - (2) 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)(2), 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 §60.482–9.
 - (2) 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 §60.482–10, except as provided in paragraph (i).
- (i) Any compressor that is designated, as described in §60.486(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)–(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 §60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) initially upon designation, annually, and at other times requested by the Administrator.

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

- 3.B.34 For pressure relief devices in gas/vapor service, 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 §60.485(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 5 calendar days after the pressure release, except as provided in §60.482–9.
 - (2) No later than 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 §60.485(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 as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b).
 - (d) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b), provided the permittee complies with the requirements in paragraph (2).
 - (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 §60.482–9.

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

- 3.B.35 For sampling connection systems, the permittee shall comply with the following:
 - (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in paragraph (c).

- (b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) shall comply with the requirements specified in paragraphs (b)(1) through (4).
 - (1) Gases displaced during filling of the sample container are not required to be collected or captured.
 - (2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.
 - (3) 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.
 - (4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (b)(4)(i), (ii), (iii), or (iv).
 - (i) Return the purged process fluid directly to the process line.
 - (ii) Collect and recycle the purged process fluid to a process.
 - (iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10.
 - (iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
 - (A) A waste management unit as defined in §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;
 - (B) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266;
 - (C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261;
 - (D) A waste management unit subject to and operated in compliance with the treatment requirements of §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are

- subject to and operated in compliance with the management requirements of §§61.343 through 61.347; or
- (E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR part 261.
- (c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b).

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

- 3.B.36 For open-ended valves or lines, the permittee shall comply with the following:
 - (a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraphs (d) and (e).
 - (2) 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 paragraph (a) at all other times.
 - (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c).
 - (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) are exempt from the requirements of paragraphs (a) through (c).

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

3.B.37 For valves in gas/vapor service and in light liquid service, the permittee shall comply with the following:

- (a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.482–1(c) and (f).
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
 - (ii) As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.
 - (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in \$60.482-9.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (1) Tightening of bonnet bolts;
 - (2) Replacement of bonnet bolts;
 - (3) Tightening of packing gland nuts;
 - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
 - (1) Has no external actuating mechanism in contact with the process fluid,
 - (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and

- (3) Is tested for compliance with paragraph (f)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
 - (1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
 - (2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
 - (1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface
 - (2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
 - (3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

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

- 3.B.38 For pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall comply with the following:
 - (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:
 - (1) The permittee shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d).
 - (2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.
 - (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

- (c) 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 §60.482–9.
 - (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under §§60.482–2(c)(2) and 60.482–7(e).

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

- 3.B.39 The following procedures must be followed for delay of repair:
 - (a) 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 must occur within 15 days after startup of the process unit.
 - (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
 - (c) Delay of repair for valves will be allowed if:
 - (1) 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
 - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with \$60.482–10.
 - (d) Delay of repair for pumps will be allowed if:
 - (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
 - (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the

- 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.
- (f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve 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 60.482-9, Subpart VV)

- 3.B.40 For closed vent systems and control devices, the permittee shall comply with the following:
 - (a) Permittees of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.
 - (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, whichever is less stringent.
 - (c) Enclosed combustion devices shall be designed and operated to reduce 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, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.
 - (d) Flares used to comply with this subpart shall comply with the requirements of §60.18.
 - (e) Permittees of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
 - (f) Except as provided in paragraphs (i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2).
 - (1) If the vapor collection system or closed vent system is constructed of hardpiping, the owner or operator shall comply with the requirements specified in paragraphs (i) and (ii):
 - (i) Conduct an initial inspection according to the procedures in §60.485(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 §60.485(b); and
 - (ii) Conduct annual inspections according to the procedures in §60.485(b).
- (g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h).
 - (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
- (h) 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 owner or operator 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.
- (i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2).
- (j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1), as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) if they comply with the requirements specified in paragraphs (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 (f)(1)(i) or (f)(2) section; and
 - (2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

- (k) Any parts of the closed vent system that are designated, as described in paragraph (1)(2), as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) if they comply with the requirements specified in paragraphs (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 §§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.
- (l) The permittee shall record the information specified in paragraphs (1) through (5).
 - (1) 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.
 - (2) 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.
 - (3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).
 - (4) For each inspection conducted in accordance with §60.485(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.
 - (5) 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.
- (m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

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

3.B.41 For the Entire Facility, the permittee shall not burn fuel oil which means any liquid fossil fuel oil with sulfur content greater than 0.05% by weight in any combustion unit, except during periods of natural gas curtailment and during periods of DOT required maintenance of the natural gas pipeline during which the facility shall burn only liquefied petroleum gas or low sulfur distillate containing less than 0.5% sulfur by weight.

(Ref.: Federally Enforceable Construction Permit issued September 19, 2011)

3.B.42 For Emission Points AG-001, AG-002, AG-003, and AG-004, the permittee is subject to and shall comply with the New Source Performance Standards for Stationary Compression Internal Combustion Engines and General Provisions (40 CFR 60, Subparts IIII and A).

(Ref.: 40 CFR 60.4200(a), Subpart IIII)

3.B.43 For Emission Points AG-001 and AG-002, the permittee must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency station CI ICE.

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

3.B.44 For Emission Points AG-003 and AG-004, the permittee shall comply with the emission standards in Table 4, for all pollutants.

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

3.B.45 For Emission Points AG-001, AG-002, AG-003, and AG-004, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(Ref.: 40 CFR 60.4207(b), Subpart IIII)

3.B.46 For Emission Point AA-025, the permittee is subject to and shall comply with National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and General Provisions (40 CFR 63, Subparts ZZZZ and A).

(Ref.: 40 CFR 63.6585, Subpart ZZZZ)

- 3.B.47 For Emission Point AA-025, the permittee shall:
 - (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
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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

3.B.48 For Emission Point AA-018R, the permittee shall burn only natural gas or refinery fuel gas.

(Ref.: Title V Operating Permit issued January 5, 2017)

3.B.49 For Emission Point AA-018R, the permittee is subject to and shall comply with all applicable requirements of Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification commenced after May 14, 2007 (40 CFR 60, Subpart Ja) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.100a(a), Subpart Ja)

3.B.50 For Emission Point AA-018R, the permittee shall not burn in any fuel gas combustion device any fuel gas that contains H₂S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H₂S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

(Ref.: 40 CFR 60.102a(g)(1)(ii), Subpart Ja)

- 3.B.51 For Emission Point AA-018R, the permittee shall not discharge to the atmosphere any emissions of NO_x in excess of the applicable limits in 40 CFR 60.102a(g)(2)(i)(A) or (B). The permittee shall comply with either limit at any time, provided that the appropriate parameters for each alternative are monitored as specified in 40 CFR 60.107a; if fuel gas composition is not monitored as specified in 40 CFR 60.107a(d), the permittee shall comply with the concentration limits in 40 CCFR 60.102a(g)(2)(i)(A).
 - (A) 40 ppmv (dry basis, corrected to 0-percent excess air) determined daily on a 30-day rolling average basis; or
 - (B) 0.040 pounds per million British thermal units (lb/MMBtu) higher heating value basis determined daily on a 30-day rolling average basis.

(Ref.: 40 CFR 60.102a(g)(2)(i)(A) and (B), Subpart Ja)

- 3.B.52 For Emission Point AT-244, the permittee shall equip each storage vessel with an external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:
 - (i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. The seal shall completely cover the annular space between

- the edge of the floating roof and tank wall.
- (B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.
- (ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
- (iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(Ref.: 40 CFR 60.112b(a)(2), Subpart Kb)

C. Insignificant and Trivial Activity Emission Limitations & Standards

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

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

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

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

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

SECTION 4. COMPLIANCE SCHEDULE

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

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

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. <u>General Monitoring, Recordkeeping and Reporting Requirements</u>
 - 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below
 - 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
 - (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.

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

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

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

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

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

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said

report shall be made within five (5) days of the time the deviation began.

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

- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AT-111 AT-112 AT-207 AT-215 AT-216 AT-218 through AT-221 AT-224 through AT-226 AT-242 AT-258 AT-274 AT-301 AT-302 AT-351 through AT-358 AV-350 AV-351	Opacity	Daily observations of emissions from asphalt storage tanks	5.B.1	40 CFR 60.474(c)(5), Subpart UU
AT-243 AT-244 AT-252 AT-265	VOC	Recordkeeping	5.B.2	40 CFR 60.116b(a), (b), and (c), Subpart Kb
AT-243 AT-244 AT-252 AT-265	VOC	Recordkeeping	5.B.3	40 CFR 60.113b(a), (b), and 60.115b(a), Subpart Kb
AT-201 AT-202 AT-203 AT-205 AT-206 AT-209	VOC	Recordkeeping	5.B.4	40 CFR 60.115a(a), Subpart Ka

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AT-212 AT-252				
AT-201 AT-202 AT-206	VOC	Recordkeeping	5.B.5	40 CFR 60.113a(a)(1), Subpart Ka
AA-014 AA-016 AA-017 AA-018R AA-019 AA-022 AA-024 AA-025 AA-043 AA-049 AA-202 AA-208 AA-209 AB-001 AB-002 AH-016 AH-017a AH-017b AH-018	Fuel	Recordkeeping	5.B.6	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)
AA-014 AA-019 AA-022 AA-024 AA-049 AA-202 AA-208 AH-018	$ m H_2S$	Monitoring and Recordkeeping	5.B.7	40 CFR 60.105(a)(4), Subpart J
AA-025 AG-001 AG-002 AG-003 AG-004	Hours of Operation	Monitoring and Recordkeeping	5.B.8	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
AA-019 AA-022	NOx	Biennial Stack Testing using EPA Test Method 7E or an EPA approved alternative	5.B.9	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
AA-043	NOx/SO ₂	Monitoring and Recordkeeping	5.B.10	40 CFR 60.334(b) and (h), Subpart GG
AA-043	NOx/SO ₂	Compliance Testing	5.B.11	40 CFR 60.335, Subpart GG
AA-026	Benzene	Recordkeeping	5.B.12	40 CFR 61.355(a)(5), Subpart FF
AA-026	VOC	Recordkeeping	5.B.13	40 CFR 60.697(b), Subpart QQQ
			5.B.14	40 CFR 60.697(e), Subpart QQQ

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Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
			5.B.15	40 CFR 60.697(f)(1) and (2), Subpart QQQ
			5.B.16	40 CFR 60.697(c), Subpart QQQ
BB-001	Ammonia	Compliance Demonstration	5.B.17	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
Facility Wide	VOC	Test Methods	5.B.18	40 CFR 60.485(a), (b), (c), (d), (e), and (f), Subpart VV
		Recordkeeping	5.B.19	40 CFR 60.486, Subpart VV
AA-024	Hydrocarbon and Acid Gas	Good Air Pollution Control Practices	5.B.20	Federally Enforceable Construction Permit issued September 19, 2011
		Monitoring	5.B.21	
		Implement a program to investigate the cause of Acid Gas Flaring Incidents	5.B.22	
		Corrective Action	5.B.23	
		Implement a program to investigate the cause of Hydrocarbon Flaring Incidents	5.B.24	
AG-001 AG-002 AG-003 AG-004	NMHC + NOx CO PM	Install a non-resettable hour meter prior to startup of the engine.	5.B.25	40 CFR 60.4209(a), Subpart IIII
AG-004		Compliance Requirements	5.B.26	40 CFR 60.4211(a), Subpart IIII
			5.B.27	40 CFR 60.4211(c), Subpart IIII
			5.B.28	40 CFR 60.4211(e), Subpart IIII
		Recordkeeping	5.B.28	40 CFR 60.4214(b), Subpart IIII
AA-025	НАР	Maintenance	5.B.30	40 CFR 63.6625(e), Subpart ZZZZ
		Installation	5.B.31	40 CFR 63.6625(f), Subpart ZZZZ
		Operation	5.B.32	40 CFR 63.6625(h), Subpart ZZZZ
		Continuous Compliance	5.B.33	40 CFR 63.6605, Subpart ZZZZ
			5.B.34	40 CFR 63.6640(f), Subpart ZZZZ
		Recordkeeping	5.B.35	40 CFR 63.6655, Subpart ZZZZ

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Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-018R	SO_2	Root Cause Analysis and Corrective Action Analysis	5.B.36	40 CFR 60.103a(c)(2), Subpart Ja
		Confective Action Analysis	5.B.37	40 CFR 60.103a(d)(1) and (5), Subpart Ja
		Corrective Action	5.B.38	40 CFR 60.103a(e), Subpart Ja
	NOx	Performance Test Requirements	5.B.39	40 CFC 60.104a(a), Subpart Ja
			5.B.40	40 CFR 60.104a(c), Subpart Ja
			5.B.41	40 CFR 60.104a(i), Subpart Ja
	H_2S	H ₂ S	5.B.42	40 CFR 60.104a(j), Subpart Ja
	H_2S		5.B.43	40 CFR 60.107a(a)(2), Subpart Ja
	NOx Continuous Monitoring	5.B.44	40 CFR 60.107a(c). Subpart Ja	
			5.B.45	40 CFR 60.107a(d)(1) – (4), Subpart Ja
	H ₂ S/NOx	Excess Emissions	5.B.46	40 CFR 60.107a(i), Subpart Ja
AA-018R	H ₂ S/NOx	Recordkeeping	5.B.47	40 CFR 60.108a(a), Subpart Ja
			5.B.48	40 CFR 60.108a(c), Subpart Ja

5.B.1 For Emission Points AT-207, AT-215, AT-216, AT-218 through AT-221, AT-224 through AT-226, AT-242, AT-258, AT-274, AT-301, AT-302, AT-351 through AT-358, AV-350, and AV-351, the permittee shall assure compliance with the opacity limits by daily observations of emissions from the asphalt storage tanks. If any visible emissions are detected, then EPA Reference Method 9 shall be performed.

(Ref.: 40 CFR 60.474(c)(5), Subpart UU)

5.B.2 For Emission Points AT-243, AT-244, AT-252, and AT-265, the permittee shall keep records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records are required to be kept for the life of the source. In addition, for Emission Points AT-243, AT-244, and AT-265, the permittee shall maintain a record of the Volatile Organic Liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

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

5.B.3 For Emission Points AT-239, AT-243, AT-252, and AT-265, the permittee shall inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessels with Volatile Organic Liquids (VOL's). The permittee shall inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. The permittee is also required to keep a record of each inspection performed.

For Emission Point AT-244, the permittee shall inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. The permittee is also required to keep a record of each inspection performed.

(Ref.: 40 CFR 60.113b(a), (b), and 40 CFR 60.115b(a), Subpart Kb)

5.B.4 For Emission Points AT-201, AT-202, AT-203, AT-205, AT-206, AT-208, AT-212, AT-222, AT-227, AT-228, and AT-252, the permittee shall maintain records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

(Ref.: 60 CFR 60.115a(a), Subpart Ka)

5.B.5 For Emission Points AT-201, AT-202, and AT-206, the permittee shall determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall within 60 days of the initial fill with petroleum liquid and at least once every five (5) years thereafter for primary seals and once every year thereafter for secondary seals.

(Ref.: 40 CFR 60.113a(a)(1), Subpart Ka))

5.B.6 For Emission Points AA-014, AA-016, AA-017, AA-018R, AA-019, AA-022, AA-024, AA-025, AA-043, AA-049, , AA-202, AA-208, AA-209, AB-001, AB-002, AH-016, AH-017a, AH-017b, and AH-018, the permittee shall maintain records of the type and quantity of fuels used on a daily basis in accordance with Condition 5.A.3.

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

5.B.7 For Emission Points AA-014, AA-018, AA-019, AA-022, AA-024, AA-049, AA-202, AA-208, and AH-018, the permittee shall use an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion devices as required in 40 CFR 60.105(a)(4), Subpart J. The permittee shall maintain these records in accordance with Condition 5.A.3.

(Ref.: 40 CFR 60.105(a)(4), Subpart J)

5.B.8 For Emission Points AA-025, AG-001, AG-002, AG-003, and AG-004, the permittee shall maintain a daily log of engine operating hours with a calculation of the 365 day rolling total engine hours. The permittee shall maintain these records daily on a rolling 365 day basis.

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

5.B.9 For Emission Points AA-019, and AA-022, permittee shall perform biennial stack testing to demonstrate compliance within 24 months of previous stack test. The testing shall be done in accordance with EPA Reference Method 7E, 40 CFR 60, Appendix A, or any other EPA approved method to demonstrate compliance with the permitted emission limitations for Nitrogen Oxides.

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

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

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

5.B.10 For Emission Point AA-043, the permittee shall monitor and record daily sulfur content and nitrogen content of the fuel being fired in the turbine.

(Ref.: 40 CFR 60.334(b) and (h), Subpart GG)

5.B.11 For Emission Point AA-043, the permittee shall comply with the test methods and procedures outlined in 40 CFR 60.335.

(Ref.: 40 CFR 60.335, Subpart GG)

5.B.12 For Emission Point AA-026, the permittee shall comply with recordkeeping requirements of §61.356. The permittee shall also repeat determinations of the TAB quantity from facility waste whenever there is a change in process generating the waste that could cause the TAB quantity from the facility waste to increase to 1 Mg/yr or more.

(Ref.: 40 CFR 61.355(a)(5), Subpart FF)

- 5.B.13 For Emission Point AA-026, the permittee shall comply with the following recordkeeping requirements:
 - (1) For individual drain systems, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.
 - (2) For junction boxes, the location, date, and corrective action shall be recorded for inspections required by §60.692-2(b) (Condition 3.B.25) when a broken seal, gap, or other problem is identified that could result in VOC emissions.
 - (3) For sewer lines, the location, date, and corrective action shall be recorded for inspections required by §60.692-2(c) (Condition 3.B.26) when a problem is identified that could result in VOC emissions.

(Ref.: 40 CFR 60.697(b), Subpart QQQ)

- 5.B.14 For Emission Point AA-026, the permittee shall comply with the following recordkeeping requirements:
 - (1) If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.
 - (2) The reason for the delay as specified in §60.692–6 shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.
 - (3) The signature of the permittee whose decision it was that repair could not be affected without refinery or process shutdown shall be recorded.
 - (4) The date of successful repair or corrective action shall be recorded.

(Ref.: 40 CFR 60.697(e), Subpart QQQ)

- 5.B.15 For Emission Point AA-026, the permittee shall comply with the following recordkeeping requirements:
 - (1) A copy of the design specifications for all equipment used to comply with the provisions of this subpart shall be kept for the life of the source in a readily accessible location.
 - (2) The following information pertaining to the design specifications shall be kept.
 - (i) Detailed schematics, and piping and instrumentation diagrams.
 - (ii) The dates and descriptions of any changes in the design specifications.

(Ref.: 40 CFR 60.697(f) (1) and (2), Subpart QQQ)

5.B.16 For Emission Point AA-026, the permittee shall comply with the following recordkeeping requirements: For oil-water separators, the location, date, and corrective action shall be recorded for inspections required by §60.692-3(a) (Condition 3.B.27) when a problem is identified that could result in VOC emissions.

(Ref.: 40 CFR 60.697(c), Subpart QQQ)

5.B.17 For Emission Point BB-001, the permittee shall demonstrate compliance with the ammonia limit by collecting samples on the inlet and outlet of the sour water stripper once per feedstock per month.

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

5.B.18 For equipment leaks, the permittee shall comply with the test methods in §60.485(a), (b), (c), (d), (e), and (f).

(Ref.: 40 CFR 60.485(a), (b), (c), (d), (e), and (f), Subpart VV)

- 5.B.19 For equipment leaks, the permittee shall comply with the following recordkeeping requirements:
 - (a) When each leak is detected as specified in §§60.482-2, 60.482-3, 60.482-7, and 60.482-8 (Conditions 3.B.32, 3.B.33, 3.B.37, and 3.B.38), the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

- (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7(c) (Condition 3.B.37) and no leak has been detected during those 2 months.
- (3) The identification on equipment except on a valve, may be removed after it has been repaired.
- (b) When each leak is detected as specified in §§60.482-2 60.482-3, 60.487-1, and 60.482-8 (Conditions 3.B.32, 3.B.33, 3.B.37, and 3.B.38), the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
 - (1) The instrument and operator identification numbers and the equipment identification number.
 - (2) The date the leak was detected and the dates of each attempt to repair the leak
 - (3) Repair methods applied in each attempt to repair the leak.
 - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in Condition 5.B.18(a) after each repair attempt is equal to or greater than 10,000 ppm.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (6) The signature of the permittee whose decision it was that repair could not be effected without a process shutdown.
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (9) The date of successful repair of the leak.
- (c) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482-10 (Condition 3.B.40) shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.

- (3) A description of the parameter or parameters monitored, as required in §60.482-10(e) (Condition 3.B.40), 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.
- Periods when the closed vent systems and control devices required in §60.482-2, 60.482-3, 60.482-4, and 60.482-5 (Conditions 3.B.32, 3.B.33, 3.B.34, and 3.B.35) are not operated as designed, including periods when a flare pilot light does not have a flame.
- (5) Dates of startups and shutdowns of the closed vent systems and control devices required in §60.482-2, 60.482-3, 60.482-4, and 60.482-5 (Conditions 3.B.32, 3.B.33, 3.B.34, and 3.B.35).
- (d) The following information pertaining to all equipment subject to the requirements in §§60.482-2 through 60.482-10 (Conditions 3.B.32 through 3.B.40) shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for equipment subject to the requirements of this subpart.
 - (2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §60.482-2(e), 60.482-3(i), and 60.482-7(f) (Conditions 3.B.32, 3.B.33 and 3.B.37).
 - (ii) The designation of equipment as subject to the requirements of §60.482-2(e), 60.482-3(i), and 60.482-7(f) (Conditions 3.B.32, 3.B.33 and 3.B.37) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with their permitting authority that satisfies this requirement.
 - (3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4 (Condition 3.B.34).
 - (4) (i) The dates of each compliance test as required in §60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f) (Conditions 3.B.32, 3.B.32, 3.B.34 and 3.B.37).
 - (ii) The background level measured during each compliance test.
 - (iii) The maximum instrument reading measured at the equipment during each compliance test.
 - (5) A list of identification numbers for equipment in vacuum service.

- (6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr, 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.
- (e) The following information pertaining to all valves subject to the requirements of \$60.482-7(g) (Conditions 3.B.37) and to all pumps subject to the requirements of \$60.482-2(g) (Condition 3.B.32) shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (f) The following information shall be recorded in a log that is kept in a readily accessible location:
 - (1) Design criterion required in §§60.482-2(d)(5) and 60.482-3(e)(2) (Conditions 3.B.32 and 3.B.33) and explanation of the design criterion; and
 - (2) Any changes to this criterion and the reasons for the changes.
- (g) 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.
- (k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

(Ref.: 40 CFR 60.486, Subpart VV)

5.B.20 For Emission Point AA-024, the permittee shall comply with the NSPS obligation to implement good air pollution control practices as required by 40 CFR 60.11(d) to minimize Hydrocarbon and Acid Gas Flaring Incidents.

(Ref: Federally Enforceable Construction Permit issued September 19, 2011)

5.B.21The permittee shall insure that continuous or intermittent, routinely generated refinery fuel gases that are combusted in AA-024 are monitored by CEMS as required by §60.105(a)(4). The permittee shall install an instrument for continuously monitoring nad

recording the concentration (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion device.

(Ref.: 40 CFR 60.105(a)(4), Subpart J and Federally Enforceable Construction Permit issued September 19, 2011)

- 5.B.22 For Emission Point AA-024, the permittee shall implement a program to investigate the cause of Acid Gas Flaring Incidents, take reasonable steps to correct the conditions that have caused or contributed to Acid Gas Flaring Incidents, and minimize Acid Gas Flaring Incidents. The permittee shall evaluate whether Acid Gas Flaring Incidents are due to Malfunctions by conducting a detailed analysis that sets forth the Root Cause and all contributing causes of that Acid Gas Flaring Incident, to the extent determinable; and by conducting an analysis of the measure, if any, that are available to reduce the likelihood of a recurrence of an Acid Gas Flaring Incident resulting from the same Root Cause of contributing causes in the future. The analysis should evaluate the alternatives, if any, that are available, the probably effectiveness and the cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation, and maintenance changes shall be evaluated.
 - "Acid Gas Flaring Incident" means the continuous or intermittent combustion of Acid Gas and/or Sour Water Stripper Gas that results in the emission of sulfur dioxide equal to, or in excess of five-hundred (500) pounds in any twenty-four (24) hour period; provided, however, that if five hundred (500) pounds of more of sulfur dioxide have been emitted in twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five-hundred (500) pounds of sulfur dioxide, then only one AG Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the AG Flaring Incident. "Acid Gas" means any gas that contains hydrogen sulfide and is generated at a refinery by the regeneration of amine solution.
 - "Acid Gas Flaring" means the combustion of Acid Gas and/or Sour Water Stripper Gas in an Acid Gas Flaring Device. "Acid Gas Flaring Device" shall mean any device at ERI that is used for the purpose of combusting Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid. The Acid Gas Flaring Device currently in service at ERI is AA-024.
 - "Sour Water Stripper Gas" shall mean the gas produced by the process of stripping refinery sour water.
 - "Root Cause" means the primary cause(s) of an AG Flaring Incident(s) and/or Hydrocarbon Flaring Incident(s) as determined through a process of investigation.
 - "Malfunction" means, as specified in 40 CFR Part 60.2, 'any sudden, infrequent, and not reasonable preventable failure of air pollution control equipment, process

equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are no malfunctions.

(Ref: Federally Enforceable Construction Permit issued September 19, 2011)

5.B.23 The permittee shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of that Acid Gas Flaring Incident.

(Ref: Federally Enforceable Construction Permit issued September 19, 2011)

- 5.B.24 The permittee shall implement a program to investigate the cause of Hydrocarbon Flaring Incident, take reasonable steps to correct the conditions that have caused or contributed to Hydrocarbon Flaring Incidents, and minimize Hydrocarbon Flaring Incidents. The permittee shall evaluate whether Hydrocarbon Flaring Incidents are due to Malfunctions by conducting a detailed analysis that sets forth the Root Cause and all contributing causes of that Hydrocarbon Flaring Incident, to the extent determinable; and by conducting an analysis of the measure, if any, that are available to reduce the likelihood of a recurrence of a Hydrocarbon Flaring Incident resulting from the same Root Cause of contributing causes in the future. The analysis should evaluate the alternatives, if any, that are available, the probably effectiveness and the cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation, and maintenance changes shall be evaluated.
 - "Hydrocarbon Flaring Incident" means the continuous or intermittent Hydrocarbon Flaring, except for Acid Gas or Sour Water Stripper Gas, at a Hydrocarbon Flaring Device that results in the emission of sulfur dioxide equal to, or in excess of five-hundred (500) pounds in any twenty-four (24) hour period; provided, however, that if five hundred (500) pounds of more of sulfur dioxide have been emitted in twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five-hundred (500) pounds of sulfur dioxide, then only one Hydrocarbon Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the Hydrocarbon Flaring Incident.
 - "Hydrocarbon Flaring" means the combustion of refinery-generated gases, except for Acid Gas and/or Sour Water Stripper Gas in a Hydrocarbon Flaring Device.
 - "Hydrocarbon Flaring Device" means a flare device used to control (through combustion) any excess volume of a refinery generated gas other than Acid Gas and/or Sour Water Stripper Gas. The Hydrocarbon Flaring Device currently in service at ERI is AA-024.

(Ref: Federally Enforceable Construction Permit issued September 19, 2011)

5.B.25 For Emission Points AG-001, and AG-002, the permittee shall install a non-resettable hour meter prior to startup of the engine.

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

5.B.26 For Emission Points AG-001, AG-002, AG-003, and AG-004, the permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee shall only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply.

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

5.B.27 For Emission Points AG-003 and AG-004, the permittee shall comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

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

5.B.28 For Emission Points AG-001, AG-002, AG-003, and AG-004, emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted, is prohibited.

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

5.B.29 For Emission Points AG-001, AG-002, AG-003, and AG-004, if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the permittee is not required to submit an initial notification. Starting with the model years in table 5, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must 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 must record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 40.4214(b), Subpart IIII)

5.B.30 For Emission Point AA-025, 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), Subpart ZZZZ)

5.B.31 For Emission Point AA-025, the permittee shall install a non-resettable hour meter if one is not already installed.

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

5.B.32 For Emission Point AA-025, 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 63.6225(h), Subpart ZZZZ)

5.B.33 For Emission Point AA-025, the permittee shall be in compliance with the operating limitations at all times. The permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Ref.: 40 CFR 63.6605, Subpart ZZZZ)

- 5.B.34 For Emission Point AA-025, the permittee shall operate the emergency stationary RICE according to the requirements below. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If the permittee does not operate the engine according the requirements below, the engine will not be considered an emergency engine and will need to 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 may operate the emergency stationary RICE for the purpose of maintenance checks and rediness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and rediness testing of such units is limited to 100 hours per year. The permittee may petition the MDEQ for approval of additional hours for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicated that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours a year.

(c) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that permittees may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

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

5.B.35 For Emission Point AA-025, the permittee shall keep the following records:

- (a) A copy of each notification and report that the permittee 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 §63.10(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 performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- (d) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

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 if you own or operate any of the following stationary RICE;

The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(Ref.: 40 CFR 63.6655(a), (d), (e), and (f), Subpart ZZZZ)

5.B.36 For Emission Point AA-018R, the permittee shall conduct a root cause analysis and a corrective action analysis for each exceedance of an applicable short-term emissions limit in 40 CFR 60.102a(g)(1) if the SO₂ discharge to the atmosphere is 227 kg (500 lb) greater than the amount that would have been emitted if the emissions limits had been met during one or more consecutive periods of excess emissions or any 24-hour period, whichever is shorter.

(Ref.: 40 CFR 60.103a(c)(2), Subpart Ja)

- 5.B.37 For Emission Point AA-018R, a root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting the condition in 40 CFR 60.103a(c)(2). Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in 40 CFR 60.103a(d)(1) and (5).
 - (1) If a single continuous discharge meets any of the conditions specified in 40 CFR 60.103a(c)(2) for 2 or more consecutive 24-hour periods, a single root cause analysis and corrective action analysis may be conducted.
 - (2) If discharges occur that meet the condition in 40 CFR 60.103a(c)(2) for more than one affected facility in the same 24-hour period, initial root cause analyses shall be conducted for each affected facility. If the initial root cause analyses indicate that the discharges have the same root cause(s), the initial root cause analyses can be recorded as a single root cause analysis and a single corrective action analysis may be conducted.

(Ref.: 40 CFR 60.103a(d)(1) and (5), Subpart Ja)

- 5.B.38 For Emission Point AA-018R, the permittee shall implement the corrective action(s) identified in the corrective action analysis conducted pursuant to 40 CFR 60.103a(d) in accordance with the applicable requirements in 40 CFR 60.103a(e)(1) through (3).
 - (1) All corrective action(s) must be implemented within 45 days of the discharge for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If the permittee concludes that corrective action should not be conducted, the permittee shall record and explain the basis for that conclusion no later than 45 days following the discharge as specified in 40 CFR 60.108a(c)(6)(ix).
 - (2) For corrective actions that cannot be fully implemented within 45 days following the discharge for which the root cause and corrective action analyses were required, the permittee shall develop an implementation schedule to complete the corrective action(s) as soon as practicable.
 - (3) No later than 45 days following the discharge for which a root cause and corrective action analyses were required, the permittee shall record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates as specified in 40 CFR 60.108a(c)(6)(x).

(Ref.: 40 CFR 60.103a(e), Subpart Ja)

5.B.39 For Emission Point AA-018R, the permittee shall conduct a performance test to demonstrate initial compliance with each applicable emissions limit in 40 CFR 60.102a according to the requirements of 40 CFR 60.8 (Subpart A, General Provisions). The notification requirements of 40 CFR 60.8(d) apply to the initial performance test, but does not apply to performance tests conducted for the purpose of obtaining supplemental data because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments.

(Ref.: 40 CFR 60.104a(a), Subpart Ja)

5.B.40 For Emission Point AA-018R, in conducting the performance tests required by 40 CFR 60, Subpart Ja, the permittee shall use the test methods in 40 CFR part 60, Appendices A-1 through A-8 or other methods as specified in this section(40 CFR 60.104a), except as provided in 40 CFR 60.8(b).

(Ref.: 40 CFR 60.104a(c), Subpart Ja)

- 5.B.41 For Emission Point AA-018R, the permittee shall determine compliance with the NO_x emissions limits in 40 CFR 60.102a(g) for a fuel gas combustion device according to the following test methods and procedures:
 - (1) Method 1 of appendix A-1 to part 60 for sample and velocity traverses;
 - (2) Method 2 of appendix A-1 to part 60 for velocity and volumetric flow rate;
 - (3) Method 3, 3A, or 3B of appendix A-2 to part 60 for gas analysis. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 3B of appendix A-2 to part 60;
 - (4) Method 7, 7A, 7C, 7D, or 7E of appendix A-4 to part 60 for moisture content and for the concentration of NO_x calculated as NO₂; the duration of each test run must be no less than 4 hours. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 7 or 7C of appendix A-4 to part 60.
 - (5) For process heaters with a rated heat capacity between 40 and 100 MMBtu/hr that elect to demonstrate continuous compliance with a maximum excess oxygen limit as provided in 40 CFR 60.107a(c)(6) or (d)(8), the permittee shall establish the O₂ operating limit or O₂ operating curve based on the performance test results according to the requirements in 40 CFR 60.104a(i)(6)(i) or (ii), respectively.
 - (i) If a single O₂ operating limit will be used:
 - (A) Conduct the performance test following the methods provided in 40 CFR 60.104a(i)(1), (2), (3) and (5) when the process heater is firing at no less than 70 percent of the rated heat capacity. For cofired process heaters, conduct at least one of the test runs while the process heater is being supplied by both fuel gas and fuel oil and conduct at least one of the test runs while the process heater is being supplied solely by fuel gas.
 - (B) Each test will consist of three test runs. Calculate the NO_x concentration for the performance test as the average of the NO_x concentrations from each of the three test runs. If the NO_x concentration for the performance test is less than or equal to the numerical value of the applicable NO_x emissions limit (regardless of averaging time), then the test is considered to be a valid test.
 - (C) Determine the average O₂ concentration for each test run of a valid test.

- (D) Calculate the O₂ operating limit as the average O₂ concentration of the three test runs from a valid test.
- (ii) If an O₂ operating curve will be used:
 - (A) Conduct a performance test following the methods provided in 40 CFR 60.104a(i)(1), (2), (3) and (5) at a representative condition for each operating range for which different O₂ operating limits will be established. Different operating conditions may be defined as different firing rates (e.g., above 50 percent of rated heat capacity and at or below 50 percent of rated heat capacity) and/or, for co-fired process heaters, different fuel mixtures (e.g., primarily gas fired, primarily oil fired, and equally co-fired, *i.e.*, approximately 50 percent of the input heating value is from fuel oil). Performance tests for different operating ranges may be conducted at different times.
 - (B) Each test will consist of three test runs. Calculate the NO_x concentration for the performance test as the average of the NO_x concentrations from each of the three test runs. If the NO_x concentration for the performance test is less than or equal to the numerical value of the applicable NO_x emissions limit (regardless of averaging time), then the test is considered to be a valid test.
 - (C) If an operating curve is developed for different firing rates, conduct at least one test when the process heater is firing at no less than 70 percent of the rated heat capacity and at least one test under turndown conditions (*i.e.*, when the process heater is firing at 50 percent or less of the rated heat capacity). If O₂ operating limits are developed for co-fired process heaters based only on overall firing rates (and not by fuel mixtures), conduct at least one of the test runs for each test while the process heater is being supplied by both fuel gas and fuel oil and conduct at least one of the test runs while the process heater is being supplied solely by fuel gas.
 - (D) Determine the average O₂ concentration for each test run of a valid test.
 - (E) Calculate the O₂ operating limit for each operating range as the average O₂ concentration of the three test runs from a valid test conducted at the representative conditions for that given operating range.

- (F) Identify the firing rates for which the different operating limits apply. If only two operating limits are established based on firing rates, the O₂ operating limits established when the process heater is firing at no less than 70 percent of the rated heat capacity must apply when the process heater is firing above 50 percent of the rated heat capacity and the O₂ operating limits established for turndown conditions must apply when the process heater is firing at 50 percent or less of the rated heat capacity.
- (G) Operating limits associated with each interval will be valid for 2 years or until another operating limit is established for that interval based on a more recent performance test specific for that interval, whichever occurs first. The permittee shall use the operating limits determined for a given interval based on the most recent performance test conducted for that interval.
- (6) The permittee of a process heater complying with a NO_x limit in terms of lb/MMBtu as provided in 40 CFR 60.102a(g)(2)(i)(B) or a process heater with a rated heat capacity between 40 and 100 MMBtu/hr that elects to demonstrate continuous compliance with a maximum excess O₂ limit, as provided in 40 CFR 60.107a(c)(6) or (d)(8), shall determine heat input to the process heater in MMBtu/hr during each performance test run by measuring fuel gas flow rate, fuel oil flow rate (as applicable) and heating value content according to the methods provided in 40 CFR 60.107a(d)(5), (d)(6), and (d)(4) or (d)(7), respectively.
- (7) The permittee shall use Equation 8 of 40 CFR 60.104a(i) to adjust pollutant concentrations to 0-percent O₂ or 0- percent excess air.

(Ref.: 40 CFR 60.104a(i), Subpart Ja)

- 5.B.42 For Emission Point AA-018R, the permittee shall determine compliance with the applicable H₂S emissions limit in 40 CFR 60.102a(g)(1) according to the following test methods and procedures: EPA Method 11, 15 or 15A of appendix A-5 to part 60 or EPA Method 16 of appendix A-6 to part 60 for determining the H₂S concentration for affected facilities using an H₂S monitor as specified in 40 CFR 60.107a(a)(2). The method ANSI/ASME PTC 19.10-1981 (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to part 60. The permittee shall demonstrate compliance based on the mixture used in the fuel gas combustion device for each individual fuel gas stream used in the fuel gas combustion device.
 - (i) For Method 11 of appendix A-5 to part 60, the sampling time and sample volume must be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times must be taken at about 1-hour intervals. The arithmetic average of these two samples constitutes a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although

- fuel gases containing low concentrations of H₂S may necessitate sampling for longer periods of time.
- (ii) For Method 15 of appendix A-5 to part 60, at least three injects over a 1-hour period constitutes a run.
- (iii) For Method 15A of appendix A-5 to part 60, a 1-hour sample constitutes a run. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to part 60.
- (iv) If monitoring is conducted at a single point in a common source of fuel gas as allowed under 40 CFR 60.107a(a)(2)(iv), only one performance test is required. That is, performance tests are not required when a new affected fuel gas combustion device is added to a common source of fuel gas that previously demonstrated compliance.

(Ref.: 40 CFR 60.104a(j), Subpart Ja)

- 5.B.43 For Emission Point AA-018R, if electing to comply with the H₂S concentration limits in 40 CFR 60.102a(g)(1)(ii), the permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H₂S in the fuel gases before being burned in any fuel gas combustion device or flare
 - (i) Install, operate and maintain each H₂S monitor according to Performance Specification 7 of appendix B to part 60. The span value for this instrument is 300 ppmv H₂S.
 - (ii) Conduct performance evaluations for each H₂S monitor according to the requirements of 40 CFR 60.13(c) and Performance Specification 7 of appendix B to part 60. The permittee shall use Method 11, 15, or 15A of appendix A-5 to part 60 or Method 16 of appendix A-6 to part 60 for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to part 60.
 - (iii) Comply with the applicable quality assurance procedures in appendix F to part 60 for each H₂S monitor.
 - (iv) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned in the respective fuel gas combustion devices.

(Ref.: 40 CFR 60.107a(a)(2), Subpart Ja)

- 5.B.44 For Emission Point AA-018R, if electing to comply with the applicable emissions limit in 40 CFR 60.102a(g)(2)(i)(A), (g)(2)(ii)(A), (g)(2)(iii)(A) or (g)(2)(iv)(A), the permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, 0-percent excess air) of NO_x emissions into the atmosphere according to the requirements in 40 CFR 60.107a(c)(1) through (5), except as provided in 40 CFR 60.107a(c)(6). The monitor must include an O₂ monitor for correcting the data for excess air.
 - (1) Except as provided in 40 CFR 60.107a(c)(6), the permittee shall install, operate and maintain each NO_x monitor according to Performance Specification 2 of appendix B to part 60. The span value of this NO_x monitor must be between 2 and 3 times the applicable emissions limit, inclusive.
 - (2) The permittee shall conduct performance evaluations of each NO_x monitor according to the requirements in 40 CFR 60.13(c) and Performance Specification 2 of appendix B to part 60. The permittee shall use Methods 7, 7A, 7C, 7D, or 7E of appendix A-4 to part 60 for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 7 or 7C of appendix A-4 to part 60.
 - (3) The permittee shall install, operate, and maintain each O₂ monitor according to Performance Specification 3 of appendix B to part 60. The span value of this O₂ monitor must be selected between 10 and 25 percent, inclusive.
 - (4) The permittee shall conduct performance evaluations of each O₂ monitor according to the requirements in 40 CFR 60.13(c) and Performance Specification 3 of appendix B to part 60. Method 3, 3A, or 3B of appendix A-2 to part 60 shall be used for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 CFR 60.17) is an acceptable alternative to EPA Method 3B of appendix A-2 to part 60.
 - (5) The permittee shall comply with the quality assurance requirements in Procedure 1 of appendix F to part 60 for each NO_x and O₂ monitor, including quarterly accuracy determinations for NO_x monitors, annual accuracy determinations for O₂ monitors, and daily calibration drift tests.
 - (6) If the process heater that has a rated heating capacity of less than 100 MMBtu and is equipped with combustion modification-based technology to reduce NO_x emissions (*i.e.*, low-NO_x burners, ultra-low-NO_x burners), the permittee shall elect to comply with the monitoring requirements in 40 CFR 60.107a(c)(1) through (5) or, alternatively, the permittee shall conduct biennial performance tests according to the requirements in 40 CFR 60.104a(i), establish a maximum excess O₂

operating limit or operating curve according to the requirements in 40 CFR 60.104a(i)(6) and comply with the O₂ monitoring requirements in 40 CFR 60.107a(c)(3) through (5) to demonstrate compliance. If an O₂ operating curve is used (*i.e.*, if different O₂ operating limits are established for different operating ranges), the permittee shall also monitor fuel gas flow rate, fuel oil flow rate (as applicable) and heating value content according to the methods provided in 40 CFR 60.107a(d)(5), (d)(6), and (d)(4) or (d)(7), respectively.

(Ref.: 40 CFR 60.107a(c), Subpart Ja)

- 5.B.45 For Emission Point AA-018R, if electing to comply with the applicable emissions limit in 40 CFR 60.102a(g)(2)(i)(B) or (g)(2)(ii)(B), the permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, 0-percent excess air) of NO_x emissions into the atmosphere and shall determine the F factor of the fuel gas stream no less frequently than once per day according to the monitoring requirements in 40 CFR 60.107a(d)(1) through (4).
 - (1) The permittee shall install, operate and maintain each NO_x monitor according to the requirements in 40 CFR 60.107a(c)(1) through (5). The monitor must include an O₂ monitor for correcting the data for excess air.
 - (2) Except as provided in 40 CFR 60.107a(d)(3), the permittee shall sample and analyze each fuel stream fed to the process heater using the methods and equations in section 12.3.2 of EPA Method 19 of appendix A-7 to part 60 to determine the F factor on a dry basis. If a single fuel gas system provides fuel gas to several process heaters, the F factor may be determined at a single location in the fuel gas system provided it is representative of the fuel gas fed to the affected process heater(s).
 - (3) As an alternative to the requirements in 40 CFR 60.107a(d)(2), the permittee of a gas-fired process heater shall install, operate and maintain a gas composition analyzer and determine the average F factor of the fuel gas using the factors in Table 1 of 40 CFR 60, Subpart Ja and Equation 13 of 40 CFR 60.107a(d)(3). If a single fuel gas system provides fuel gas to several process heaters, the F factor may be determined at a single location in the fuel gas system provided it is representative of the fuel gas fed to the affected process heater(s).
 - (4) The permittee shall conduct performance evaluations of each compositional monitor according to the requirements in Performance Specification 9 of appendix B to part 60.

(Ref.: 40 CFR 60.107a(d)(1) - (4), Subpart Ja)

5.B.46 For Emission Point AA-018R, periods of excess emissions are defined as specified in 40 CFR 60.107a(i)(1) through (5). Determine a rolling 3-hour or a rolling daily average as the arithmetic average of the applicable 1-hour averages (e.g., a rolling 3-hour average is

the arithmetic average of three contiguous 1-hour averages). Determine a rolling 30-day or a rolling 365-day average as the arithmetic average of the applicable daily averages (e.g., a rolling 30-day average is the arithmetic average of 30 contiguous daily averages).

- (1) H₂S limits for fuel gas combustion devices: If the permittee elects to comply with the H₂S concentration limits in 40 CFR 60.102a(g)(1)(ii), each rolling 3-hour period during which the average concentration of H₂S as measured by the H₂S continuous monitoring system required under 40 CFR 60.107a(a)(2) exceeds 162 ppmv and each rolling 365-day period during which the average concentration as measured by the H₂S continuous monitoring system under 40 CFR 60.107a(a)(2)exceeds 60 ppmv.
- (2) Rolling 30-day average NO_x limits for fuel gas combustion devices. Each rolling 30-day period during which the average concentration of NO_x as measured by the NO_x continuous monitoring system required under 40 CFR 60.107a(c) and (d) exceeds 40 ppmv and, if monitored according to 40 CFR 60.107a(d), 0.040 lb/MMBtu;
- (3) Daily NO_x limits for fuel gas combustion devices. Each day during which the concentration of NO_x as measured by the NO_x continuous monitoring system required under 40 CFR 60.107a(d) exceeds the daily average emissions limit calculated using Equation 3 in 40 CFR 60.102a(g)(2)(iii)(B) or Equation 4 in 40 CFR 60.102a(g)(2)(iv)(B).
- (4) Daily O₂ limits for fuel gas combustion devices. Each day during which the concentration of O₂ as measured by the O₂ continuous monitoring system required under 40 CFR 60.107a(c)(6) or (d)(8) exceeds the O₂ operating limit or operating curve determined during the most recent biennial performance test.

(Ref.: 40 CFR 60.107a(i), Subpart Ja)

5.B.47 For Emission Point AA-018R, the permittee shall comply with the notification, recordkeeping, and reporting requirements in 40 CFR 60.7 and other requirements as specified in 40 CFR 60.108a.

(Ref.: 40 CFR 60.108a(a), Subpart Ja)

- 5.B.48 For Emission Point AA-018R, the permittee maintain the following records:
 - (1) For each fuel gas stream to which one of the exemptions listed in 40 CFR 60.107a(a)(3) applies, records of the specific exemption determined to apply for each fuel stream. If the permittee applies for the exemption described in 40 CFR 60.107a(a)(3)(iv), the permittee shall keep a copy of the application as well as the letter from the MDEQ granting approval of the application.

- (2) Records of discharges greater than 500 lb SO₂ in excess of the allowable limits from a fuel gas combustion device in any 24-hour period as required by 40 CFR 60.103a(c). The following information shall be recorded no later than 45 days following the end of a discharge exceeding the thresholds:
 - (i) A description of the discharge.
 - (ii) The date and time the discharge was first identified and the duration of the discharge.
 - (iii) The measured or calculated cumulative quantity of gas discharged over the discharge duration. If the discharge duration exceeds 24 hours, record the discharge quantity for each 24-hour period.
 - (iv) For each discharge greater than 500 lb SO₂ in excess of the applicable short-term emissions limit in 40 CFR 60.102a(g)(1) from a fuel gas combustion device, either the measured concentration of H₂S in the fuel gas or the measured concentration of SO₂ in the stream discharged to the atmosphere. Process knowledge can be used to make these estimates for fuel gas combustion devices except as provided in 40 CFR 60.107a(e)(4).
 - (v) For each discharge greater than 500 lb SO₂ in excess of the allowable limits from a fuel gas combustion device, the cumulative quantity of H₂S and SO₂ released into the atmosphere. For fuel gas combustion devices, assume 99-percent conversion of H₂S to SO₂.
 - (vi) The steps that the permittee took to limit the emissions during the discharge.
 - (vii) The root cause analysis and corrective action analysis conducted as required in 40 CFR 60.103a(d), including an identification of the affected facility, the date and duration of the discharge, a statement noting whether the discharge resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under 40 CFR 60.103a(e).
 - (viii) For any corrective action analysis for which corrective actions are required in 40 CFR 60.103a(e), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(Ref.: 40 CFR 60.108a(c), Subpart Ja)

C. Specific Reporting Requirements

5.C.1

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AT-111 AT-112 AT-207 AT-215 AT-216 AT-218 through AT-221 AT-224 through AT-226 AT-228 AT-242 AT-258 AT-274 AT-301 AT-302 AT-351 through AT-351	Opacity	Logs of Daily Observation	5.C.1	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AT-243 AT-252 AT-265	VOC	Tank Inspection	5.C.2	40 CFR 60.115b(a)(1), (3), and (4), Subpart Kb
AT-244	VOC	Tank Inspection	5.C.3	40 CFR 60.115b(b)(1), (2), and (4), Subpart Kb
AA-014 AA-016 AA-017 AA-018R AA-019 AA-022 AA-024 AA-025 AA-043 AA-049 AA-202 AA-208 AA-209 AB-001 AB-001 AB-017a AH-017a AH-017b	Fuel	Type and quantity of fuel	5.C.4	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AA-014 AA-018R AA-019 AA-022 AA-024 AA-202 AA-208 AH-018	Fuel	Concentration of H ₂ S	5.C.5	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AA-025 AG-001 AG-002 AG-003 AG-004	Hours of Operation	Hours of Operation	5.C.6	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AA-019 AA-022	NOx	Stack Test	5.C.7	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AA-043	NOx/SO ₂	Sulfur and Nitrogen Content of Fuel	5.C.8	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AA-026	Benzene	Reporting	5.C.9	40 CFR 61.355(a), Subpart FF
AA-026	VOC	Initial and semiannual inspection reports	5.C.10	40 CFR 60.698(b)(1), Subpart QQQ
			5.C.11	40 CFR 60.698(c), Subpart QQQ
		Notification of delay	5.C.12	40 CFR 60.698(e), Subpart QQQ
BB-001	Ammonia	Reporting	5.C.13	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).
AA-000	VOC	Semiannual LDAR reports	5.C.14	40 CFR 60.487, Subpart VV
AA-018R	H ₂ S/NOx	Reporting	5.C.15	40 CFR 60.108a(b), Subpart Ja
		Excess Emissions Report	5.C.16	40 CFR 60.108a(d). Subpart Ja
AA-018R	Certification of Construction		5.C.17	11 Miss. Admin. Code Pt. 2, R. 2.5.D.
			5.C.18	11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).

5.C.1 The permittee shall submit the logs of daily observation, Method 9 performed and the results required by Condition 5.B.1 in accordance with Condition 5.A.4.

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

5.C.2 For Emission Points AT-243, AT-252, and AT-265, the permittee shall submit the following reports:

- (1) A report shall be submitted that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).
- (2) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be submitted within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (3) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be submitted within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §61.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(Ref.: 40 CFR 60.115b(a)(1), (3), and (4), Subpart Kb)

- 5.C.3 For Emission Point AT-244, the permittee shall submit the following reports:
 - (1) A report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).
 - (2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), submit a report that contains:
 - (i) The date of measurement.
 - (ii) The raw data obtained in the measurement.
 - (iii) The calculations described in §60.113b (b)(2) and (b)(3).
 - (3) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b(b)(4), submit a report within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) and the date the vessel was emptied or the repairs made and date of repair.

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

5.C.4 For Emission Points AA-014, AA-016, AA-017, AA-018R, AA-019, AA-022, AA-024, AA-025, AA-043, AA-049, AA-202, AA-208, AA-209, AB-001, AB-002, AH-016, Ah-

017a, AH-017b, and AH-018, the permittee shall submit the records of type and quantity of fuels used required by Condition 5.B.6 in accordance with Condition 5.A.4.

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

5.C.5 For Emission Points AA-014, AA-018R, AA-019, AA-022, AA-024, AA-202, AA-208, and AH-018, the permittee shall submit reports of the concentration of H₂S in fuel gases required by Condition 5.B.7 quarterly.

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

5.C.6 For Emission Points AA-025, AG-001, AG-002, AG-003, and AG-004, the permittee shall submit logs of the engine operating hours required by Condition 5.B.8 in accordance with Condition 5.A.4.

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

5.C.7 For Emission Points AA-019, and AA-022, the permittee shall submit a report of any stack test results within sixty (60) days of conducting the respective stack test.

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

5.C.8 For Emission Point AA-043, the permittee shall submit the records on sulfur and nitrogen content of fuel required by Condition 5.B.10 in accordance with Condition 5.A.4.

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

5.C.9 For Emission Point AA-026, the permittee shall comply with the reporting requirements of §61.357.

(Ref.: 40 CFR 61.355(a), Subpart FF)

5.C.10 For Emission Point AA-026, the permittee shall submit a report within 60 days after initial startup a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the permittee shall submit semiannually a certification that all of the required inspections have been carried out in accordance with these standards.

(Ref.: 40 CFR 60.698(b)(1), Subpart QQQ)

5.C.11 For Emission Point AA-026, the permittee shall submit a report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted initially and semiannually thereafter.

(Ref.: 40 CFR 60.698(c), Subpart QQQ)

5.C.12 For Emission Point AA-026, if compliance is delayed pursuant to §60.692–7, the notification required under 40 CFR 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

(Ref.: 40 CFR 60.698(e), Subpart QQQ)

5.C.13 For Emission Point BB-001, the permittee shall submit reports of ammonia monitoring required by Condition 5.B.17 in accordance with Condition 5.A.4.

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

- 5.C.14 For Emission Point AA-000, the permittee shall comply with the following reporting requirements:
 - (a) The permittee shall submit semiannual reports beginning six 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 §60.482–7 (Condition 3.B.37), excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f) (Condition 3.B.37).
 - Number of pumps subject to the requirements of §60.482–2 (Condition 3.B.32), excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) (Condition 3.B.32) and those pumps complying with §60.482–2(f) (Condition 3.B.32).
 - (4) Number of compressors subject to the requirements of §60.482–3 (Condition 3.B.33), excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) (Condition 3.B.33)) and those compressors complying with §60.482–3(h) (Condition 3.B.33).
 - (c) All semiannual reports shall include the following information, summarized from the information in §60.486 (Condition 5.B.19):
 - (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 §60.482–7(b) (Condition 3.B.37),
 - (ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1) (Condition 3.B.37),
 - (iii) Number of pumps for which leaks were detected as described in §60.482–2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii) (Condition 3.B.32),
 - (iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6) (Condition 3.B.32),
 - (v) Number of compressors for which leaks were detected as described in §60.482–3(f) (Condition 3.B.33),
 - (vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1) (Condition 3.B.33), 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 paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) The permittee shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(Ref.: 40 CFR 60.487, Subpart VV)

5.C.15 For Emission Point AA-018R, the permittee shall notify the MDEQ of the specific monitoring provisions of 40 CFR 60.107a with which the permittee intends to comply. Notifications required by this paragraph shall be submitted with the notification of initial startup required by 40 CFR 60.7(a)(3).

(Ref.: 40 CFR 60.108a(b), Subpart Ja)

- 5.C.16 For Emission Point AA-018R, the permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 CFR 60.7(c) except that the report shall contain the information specified in 40 CFR 60.108a(d)(1) through (7).
 - (1) The date that the exceedance occurred;
 - (2) An explanation of the exceedance;
 - (3) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of an affected facility or control system; and
 - (4) A description of the action taken, if any.
 - (5) The information described in 40 CFR 60.108a(c)(6) for all discharges listed in paragraph 40 CFR 60.108a(c)(6).
 - (6) For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
 - (7) A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

(Ref.: 40 CFR 60.108a(d), Subpart Ja)

5.C.17 For Emission Point AA-018R, the permittee shall submit a certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.)

5.C.18 For Emission Point AA-018R, within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.

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(Ref.: 11 Miss. Admin. Code Pt 2, R. 2.5.C(2).)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

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

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

persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

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

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1. Air Emission Regulations for the Prevention, Abatement, and

Control of Air Contaminants

11 Miss. Admin. Code Pt. 2, Ch. 2. Permit Regulations for the Construction and/or Operation of Air

Emissions Equipment

11 Miss. Admin. Code Pt. 2, Ch. 3. Regulations for the Prevention of Air Pollution Emergency

Episodes

11 Miss. Admin. Code Pt. 2, Ch. 4. Ambient Air Quality Standards

11 Miss. Admin. Code Pt. 2, Ch. 5. Regulations for the Prevention of Significant Deterioration of

Air Quality

11 Miss. Admin. Code Pt. 2, Ch. 6. Air Emissions Operating Permit Regulations for the Purposes of

Title V of the Federal Clean Air Act

11 Miss. Admin. Code Pt. 2, Ch. 7. Acid Rain Program Permit Regulations for Purposes of Title IV

of the Federal Clean Air Act

BACT Best Available Control Technology CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

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

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant

lbs/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61

or

National Emission Standards For Hazardous Air Pollutants for Source Categories, 40

CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO_x Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM₁₀ Particulate Matter less than 10 µm in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO₂ Sulfur Dioxide TPY Tons per Year TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation VHAP Volatile Hazardous Air Pollutant VOC Volatile Organic Compound