

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

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

National Aeronautics and Space Administration
John C. Stennis Space Center
Hancock County

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

Permit Issued: JUL 11 2018

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: JUN 30 2023

Permit No.: 1000-00005

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SECTION 1. GENERAL CONDITIONS

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

apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

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

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

engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).) 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.)
- 1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
- 1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform

the following:

- (a) enter upon the permittee's premises where a Title V source is located or 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).)

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section

408(a) of the Federal Act.

- (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

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

1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) the changes are not modifications under any provision of Title I of the Act;
- (b) the changes do not exceed the emissions allowable under this permit;
- (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
- (d) the permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)
- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
- (a) routine maintenance, repair, and replacement;
 - (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; 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.

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

1.21 Any change in ownership or operational control must be approved by the Permit Board.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

(a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.

(b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.

(c) Burning must not occur within 500 yards of commercial airport property, private 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.)

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

- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue

enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

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

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

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

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

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
Diesel-Fired Emergency Backup Power Generator Engines	
AA-002	300 KW (449 HP) (2.82 MMBTU/hr) Diesel-Fired Emergency Generator (Existing Institutional Emergency Compression Ignition (CI) RICE <500 HP) (Facility Ref. No. 1201-3A)
AA-012	100 KW (235 HP) (0.94 MMBTU/hr) Diesel-Fired Emergency Generator (Existing Institutional Emergency CI RICE <500 HP) (Facility Ref. No. 2105-10)
AA-013	300 KW (500 HP) (2.84 MMBTU/hr) Diesel-Fired Emergency Generator (Existing Institutional Emergency CI RICE ≥ 500 HP) (Facility Ref. No. 2201-1)
AA-015	600 KW (923 HP) (5.97 MMBTU/hr) Diesel-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 8000-IN)
AA-016	600 KW (923 HP) (5.97 MMBTU/hr) Diesel-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 8000-2S)
AA-023	300 KW (470 HP) (3.19 MMBTU/hr) Diesel-Fired Emergency Generator (New CI RICE <500 HP) (Facility Ref. No. 3204-1)
AA-024	200 KW (347 HP) (1.88 MMBTU/hr) Diesel-Fired Emergency Generator (Existing Institutional Emergency CI RICE <500 HP) (Facility Ref. No. 3418-1)
Dual-Fired Emergency Backup Power Generator Engines	
AA-017	800 KW (1,175 HP) (7.78 MMBTU/hr) Diesel and/or Natural Gas-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 1100-1)
AA-018	800 KW (1,175 HP) (7.78 MMBTU/hr) Diesel and/or Natural Gas-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 1100-2)
AA-019	800 KW (1,175 HP) (7.78 MMBTU/hr) Diesel and/or Natural Gas-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 1100-3)
AA-020	500 KW (755 HP) (4.79 MMBTU/hr) Diesel and/or Natural Gas-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 1201-1)
AA-022	400 KW (755 HP) (3.78 MMBTU/hr) Diesel and/or Natural Gas-Fired Emergency Generator (New CI RICE >500 HP) (Facility Ref. No. 2204-1)
Natural Gas-Fired Emergency Backup Power Generator Engines	
AA-014	100 KW (168 HP) (1.3 MMBTU/hr) Natural Gas-Fired Emergency Generator (New 4 Stroke Lean Burn (4SLB) Spark Ignition (SI) RICE <500 HP) (Facility Ref. No. 8100-1 NG)
AA-027	125 KW (200 HP) (1.7 MMBTU/hr) Natural Gas-Fired Emergency Generator (New 4SLB SI RICE <500 HP) (Facility Ref. No 9101-2)
AA-115	400 KW (612 HP) (4.30 MMBTU/hr) Natural Gas-Fired Emergency Generator (New 4SLB SI RICE <500 HP) (Facility Ref. No 9155)
Diesel-Fired Non-Emergency Power Generator and Water Pump Engines	
AA-051	1,500 KW (2,120 HP) (14.94 MMBTU/hr) Diesel-Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-2) with DCL Oxidation Catalyst
AA-052	1,500 KW (2,120 HP) (14.94 MMBTU/hr) Diesel-Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-3) with DCL Oxidation Catalyst
AA-053	1,500 KW (2,120 HP) (14.94 MMBTU/hr) Diesel-Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-4) with DCL Oxidation Catalyst
AA-054	1,500 KW (2,120 HP) (14.94 MMBTU/hr) Diesel-Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-5) with DCL Oxidation Catalyst
AA-055	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-6) with DCL Oxidation Catalyst
AA-056	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-7) with DCL Oxidation Catalyst

Emission Point	Description
AA-057	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-8) with DCL Oxidation Catalyst
AA-058	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-9) with DCL Oxidation Catalyst
AA-059	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-10) with DCL Oxidation Catalyst
AA-060	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-11) with DCL Oxidation Catalyst
AA-061	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-12) with DCL Oxidation Catalyst
AA-062	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-13) with DCL Oxidation Catalyst
AA-063	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-14) with DCL Oxidation Catalyst
AA-064	3,475 KW (4,660 HP) (34.611 MMBTU/hr) Diesel-Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-15) with DCL Oxidation Catalyst
Fuel Storage Tanks and Fuel Activities	
AA-073	25,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 2105-29)
AA-074	25,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 2105-30)
AA-075	25,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 4400-34A)
AA-076	25,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 4400-34B)
AA-077	2,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 4400-35)
AA-078	1,500 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 4400-36)
AA-079	15,000 Gallon Hydrocarbon/Isopropyl Alcohol Storage Tank (Facility Ref. No. B2-RP1)
AA-106	35,000 Gallon Isopropyl Alcohol Storage Tank
AA-107	35,000 Gallon Isopropyl Alcohol Storage Tank
AA-111	20,000 Gallon Diesel Storage Tank
AA-112	20,000 Gallon Diesel Storage Tank
AA-113	20,000 Gallon Diesel Storage Tank
AA-116	15,000 Gallon Isopropyl Alcohol Storage Tank (located in the E Test Complex)
Fuel Dispensing Activities	
AA-080	Gasoline Dispensing Operation With 8,000 Gallon Storage Tank (Facility Ref. 2201, Tank 1)
AA-081	Gasoline Dispensing Operation With 8,000 Gallon Storage Tank (Facility Ref. 2201, Tank 2)
AA-082	Ethanol Dispensing Operation With 8,000 Gallon Tank (Facility Ref. 2201, Tank 3)
AA-109	Fuel Dispensing Operation with a 8,000 Gallon Biodiesel Fuel Storage Tank (Facility Ref. 2105)

Emission Point	Description
AA-110	Fuel Dispensing Operation with a 12,000 Gallon Diesel Storage Tank (Facility Ref. 2105)
Miscellaneous Activities	
AA-083	Hydrochlorofluorocarbon Distillation and Clean Line Verification Process
AA-084	Site-Wide Abrasive Blast Operations
AA-085	Site-Wide Miscellaneous Paint And Solvent Usage
AA-117	Site-Wide Refrigerant Maintenance Operations
AA-114	TEA/TEB Training Facility
IA-001	Insignificant Activities: Emergency Generators (Institutional Emergency CI RICE <500 HP) including 0.09 MMBTU/hr (Ref. 1200-1), 0.12 MMBTU/hr (Ref. 4210-2), 0.12 MMBTU/hr (Ref. 4210-3), 0.12 MMBTU/hr (Ref. 4220-2), 0.12 MMBTU/hr (Ref. 4220-3)
IA-002	Insignificant Activities: External Combustion Sources including boilers, heaters, etc. each less than 10-MMBTUH
IA-003	Insignificant Liquid Product Storage Vessels
Test Cells and Test Stands	
AA-086	E-1 Complex, Cell 1 (Facility Ref. E-1, C1)
AA-087	E-1 Complex, Cell 2 (Facility Ref. E-1, C2)
AA-088	E-1 Complex, Cell 3 (Facility Ref. E-1, C3)
AA-089	E-3 Complex, Cells 1, 2 And 3 (Facility Ref. E-3,C1, C2 & C3)
AA-095	E-2 Complex, Cell 1 (Facility Ref. E-2, C1)
AA-096	E-2 Complex, Cell 2 (Facility Ref. E-2, C2)
AA-099	B-Complex, Dual Position Test Stand (Facility Ref. B-1/B-2)
AA-100	A-1 Test Stand (Facility Ref. A-1)
AA-101	A-2 Test Stand (Facility Ref. A-2)
AA-103	A-3 Test Stand and Chemical Steam Generating Units (Facility Ref. A-3)
Flare Stacks	
AA-090	E-3 Cell 2 Flare Stack (Facility Ref. FK-15A7002-LM)
AA-091	E-1 High Pressure Flare Stack (Facility Ref. FK-10A05-HV)
AA-093	E-1 Low Pressure Flare Stack (Facility Ref. FK-10A06-LH)
AA-094	E-1 Facility Flare Stack (Facility Ref. FK-10A02-LH)

Emission Point	Description
AA-097	E-2 Low Pressure Flare Stack (Facility Ref. FK-14H19-LH)
AA-098	E-2 Turbine Exhaust Flare Stack (Facility Ref. FK-14x30-GH)
AA-102	B-2 Test Stand Flare (Facility Ref. No. 4120C-1)
AA-104	A-3 Test Stand Flare #1
AA-105	A-3 Test Stand Flare #2

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-002, AA-012 through AA-020, AA-022, AA-023, AA-024, AA-027, AA-115, IA-001, and IA-002	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.B.1	PM	0.6 lb/MMBTU
AA-002, AA-012 through AA-020, AA-022, AA-023, AA-024, AA-027, AA-051 through AA-064, AA-115, and IA-001	NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ 40 CFR Part 63.6580; 40 CFR Part 63.6585(a), (c), and (f)(3); 40 CFR Part 63.6590(a)(1)(iii); 40 CFR Part 63.6590(a)(2)(iii); and 40 CFR Part 63.6590(c)(1)	3.B.2	HAPs	MACT applicability
AA-015 through AA-020, AA-022, and AA-023	NSPS for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart III 40 CFR Part 60.4200(a)(2)(i)	3.B.3		NSPS Applicability
AA-015 through AA-020 and AA-022	40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 60.4206; 40 CFR Part 60.4211(a)(3); and Tier 2 of Table 1 of 40 CFR Part 89.112(a)	3.B.4	NMHC + NOx, CO, and PM	6.4 g/kw-hr 3.5 g/kw-hr 0.2 g/kw-hr
AA-023	40 CFR Part 60.4205(b); 40 CFR Part 60.4202(a)(2); 40 CFR Part 60.4206; 40 CFR Part 60.4211(a)(3); and Tier 3 of Table 1 of 40 CFR 89.112(a)	3.B.5		4.0 g/kw-hr 3.5 g/kw-hr 0.2 g/kw-hr
AA-015 through AA-020, AA-022, and AA-023	40 CFR Part 60.4207(b) and 40 CFR Part 80.510(b)	3.B.6	Fuel Content	15 ppm maximum sulfur content and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
AA-002,	40 CFR Part 63.6640(f) and	3.B.7	HAP	Emergency Operational Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-012, AA-013, AA-024, and IA-001	40 CFR Part 63.6675			
AA-051 through AA-064	11 Miss. Admin. Code Pt. 2, R. 1.3.A(1)	3.B.8	PM	$E=0.8808 * I^{-0.1667}$
	40 CFR Part 63.6603(a); 40 CFR Part 63.6625(h); 40 CFR Part 63.6640(a); and Item 3 of Table 2d of Subpart ZZZZ	3.B.9	CO	≤ 23 ppmvd at 15 percent O2 or reduce CO emissions by ≥ 70% and minimize startup time
	40 CFR Part 63.6605	3.B.10		Continuous Compliance
AA-051 through AA-054	40 CFR Part 63.6603(a); 40 CFR Part 63.6640(a); Item 2 of Table 2b of Subpart ZZZZ; Item 10 of Table 6 of Subpart ZZZZ; and Air Title V Permit No. 1000-00005 modified September 27, 2016	3.B.11	Catalyst Temperature and Pressure Drop	Rolling 4-hour catalyst inlet temperature ≥ 425 degrees F and ≤ 1350 degrees F and Catalyst pressure drop change ≤ 2 inches
AA-055 through AA-064	40 CFR Part 63.6603(a); 40 CFR Part 63.6640(a); Item 2 of Table 2b of Subpart ZZZZ; and Item 10 of Table 6 of Subpart ZZZZ	3.B.12		Rolling 4-hour catalyst inlet temperature ≥ 450 degrees F and ≤ 1350 degrees F and Catalyst pressure drop change ≤ 2 inches
AA-086 through AA-091 and AA-093 through AA-105	PSD Construction Permit Issued March 26, 2001 and Modified August 6, 2007	3.B.13 3.B.14 3.B.15	PM PM ₁₀ SO ₂ NO _x CO VOC	10,270 lbs/test motor fired, not to exceed 24.4 tons/year 6,060 lbs/test motor fired, not to exceed 14.4 tons/year 2,520 lbs/test motor fired, not to exceed 39.4 tons/year 2,520 lbs/test motor fired, not to exceed 39.4 tons/year 558,600 lbs/test motor fired, not to exceed 1300 tons/year 50 lbs/test motor fired, not to exceed 39.4 tons/year
AA-086 through AA-089, AA-095, AA-096,	Air Title V Operating Permit issued February 5, 1998	3.B.16	Fuel Sulfur Limit	≤ 0.05% sulfur content by weight in the LOX/RP-1 propellant

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-099, AA-100, AA-101, and AA-103				
AA-115	NSPS for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ	3.B.17	NO _x , CO, and VOC	NSPS Applicability
	40 CFR Part 60.4230(a)(4)(iv)			
	40 CFR Part 60.4233(e), 40 CFR Part 60.4234, and Table 1 to 40 CFR 60, Subpart JJJJ	3.B.18	NO _x , CO, and VOC	2.0 g/bhp/hr NO _x or 160 ppmvd @ 15% O ₂ , 4.0 g/bhp/hr CO or 540 ppmvd @ 15% O ₂ , 1.0 g/bhp/hr VOC or 86 ppmvd @ 15% O ₂ ,
	40 CFR 60.4237(a)	3.B.19	Operational Restriction	Operational Requirements
AA-080 through AA-082	NESHAP for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC	3.B.20	Area Source HAPs	MACT Applicability
	40 CFR Part 63.11110, 40 CFR Part 63.11111, and 40 CFR Part 63.11112			
	40 CFR Part 63.11115(a)	3.B.21		Minimizing Emissions
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10); 40 CFR Part 63.11116(a), (c), and (d); and 40 CFR Part 63.11113(a)(2)	3.B.22		≤ 10,000 gallons/month and handling procedures
Facility-Wide	PSD Construction Permit Issued March 26, 2001 and Modified August 6, 2007 and Air Title V Operating Permit issued December 5, 2012	3.B.23	HAP	9.4 tons/year for any individual HAP and 24.4 tons/year for combined total HAP.

3.B.1 For Emission Points AA-002, AA-012 through AA-020, AA-022, AA-023, AA-024, AA-027, AA-115, IA-001, and IA-002, the permittee shall not have particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input that exceeds 0.6 lb/MMBTU. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a))

3.B.2 Emission Points AA-002, AA-012 through AA-020, AA-022, AA-023, AA-024, AA-027, AA-115, AA-051 through AA-064, and IA-001 are subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ.

Emission Points AA-002, AA-012, AA-013, AA-024 and IA-001 are existing institutional emergency compression ignition (CI) and spark ignition (SI) RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes

specified in 40 CFR 63.6640(f)(2)(ii) and (iii) and as such are only required to meet the emergency operational requirements of 40 CFR Part 63, Subpart ZZZZ.

Emission Points AA-015 through AA-020, AA-022, and AA-023, are new institutional emergency stationary CI RICE located at an area source of HAP emissions, and as such, are required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII, for CI engines. No further requirements apply for such engines under 40 CFR Part 63, Subpart ZZZZ or 40 CFR Part 63, Subpart A.

Emission Points AA-051 through AA-064 are existing stationary non-emergency CI RICE located at an area source of HAP emissions and as such, are required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

Emission Points AA-014 and AA-027 are new emergency spark ignition (SI) RICE with a site rating of less than 500 brake HP located at an area source of HAPs. As such, the emergency RICE must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ, for spark ignition engines. Emission Points AA-014 and AA-027 are 2007 model emergency SI RICE, and therefore are not subject to any emissions limitations under NSPS JJJJ. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A.

Emission Point AA-115 is a new emergency spark ignition (SI) RICE with a site rating of more than 500 brake HP located at an area source of HAPs. As such, the emergency RICE must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A.

(Ref.: 40 CFR Part 63.6580; 63.6585(a), (c), and (f)(3); 63.6590(a)(1)(iii); 63.6590(a)(2)(iii); and 63.6590(c)(1))

- 3.B.3 For Emission Points AA-015 through AA-020, AA-022, and AA-023, the permittee is subject to, and shall comply with all applicable provisions of 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Emission Points AA-015 through AA-020, AA-022, and AA-023, qualify as stationary CI ICE that commenced construction after July 11, 2005, where the stationary CI ICE were manufactured after April 1, 2006, that are not fire pump engines. (Ref. 40 CFR 60.4200(a)(2)(i))
- 3.B.4 For Emission Points AA-015 through AA-020 and AA-022, Nitrogen Oxides plus Total Non-Methane Hydrocarbons (NMHC + NO_x) emissions are limited to 6.4 grams per kilowatt-hour (g/kw-hr); Carbon Monoxide (CO) emissions are limited to 3.5 g/kw-hr; and Particulate Matter (PM) emissions are limited to 0.2 g/kw-hr. The permittee must operate and maintain each engine to achieve these emission standards over the entire

life of the engine. (Ref: 40 CFR Part 60.4205(b), 60.4202(a)(2), 60.4206, 60.4211(a)(3), and Tier 2 of Table 1 of 40 CFR Part 89.112(a))

- 3.B.5 For Emission Point AA-023, Nitrogen Oxides plus Total Non-Methane Hydrocarbons (NMHC + NO_x) emissions are limited to 4.0 grams per kilowatt-hour (g/kw-hr); Carbon Monoxide (CO) emissions are limited to 3.5 g/kw-hr; and Particulate Matter (PM) emissions are limited to 0.2 g/kw-hr. The permittee must operate and maintain the engine to achieve these emission standards over the entire life of the engine. (Ref: 40 CFR Part 60.4205(b), 60.4202(a)(2), 60.4206, 60.4211(a)(3), and Tier 3 of Table 1 of 40 CFR Part 89.112(a))
- 3.B.6 For Emission Points AA-015 through AA-020, AA-022, and AA-023, the permittee shall use diesel fuel that meets the requirements of 40 CFR Part 80.510(b) for nonroad diesel fuel. The fuel shall have a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 35 percent volume. (Ref.: 40 CFR Part 60.4207(b) and 80.510(b))
- 3.B.7 For Emission Points AA-002, AA-012, AA-013, AA-024 and IA-001, the permittee must operate each emergency stationary engine according to the requirements cited below. In order for each engine to be considered an emergency stationary engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If each engine is not operated according to these requirements, the engines will not be considered emergency engines under Subpart ZZZZ and must meet all requirements for non-emergency engines.
- (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (b) Each engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator 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 engine beyond 100 hours per calendar year.
 - (c) Each engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing.

(Ref.: 40 CFR Part 63.6640(f) and 63.6675)

- 3.B.8 For Emission Points AA-051 through AA-064, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations equal to or greater than 10 million Btu per hour heat input but less than 10,000 million Btu heat input shall not exceed an emission rate as determined by the following 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.A(1))

- 3.B.9 For Emission Points AA-051 through AA-064, the permittee shall limit the concentration of Carbon Monoxide (CO) in each unit's exhaust to 23 ppmvd at 15 percent O₂ or shall reduce CO emissions by 70 percent or more, except during startup. The permittee shall minimize each unit's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, and shall minimize each unit's time spent at idle during startup. (Ref.: 40 CFR Part 63.6603(a), 63.6625(h), 63.6640(a) and Item 3 of Table 2d of Subpart ZZZZ)
- 3.B.10 For Emission Points AA-051 through AA-064, the permittee shall, at all times, be in compliance with the applicable requirements of Subpart ZZZZ and operate and maintain the engines, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Condition 3.B.9 have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (Ref.: 40 CFR 63.6605)
- 3.B.11 For Emission Points AA-051 through AA-054, the permittee shall maintain the temperature of each engine such that the 4-hour rolling average of the catalyst inlet temperature is greater than or equal to 425 degrees F and less than or equal to 1,350 degrees F. The permittee shall also maintain the catalyst such that the pressure drop across the catalyst does not change more than 2 inches of water from the pressure drop across the catalyst measured during the initial performance test. (Ref.: 40 CFR Part 63.6603(a), 40 CFR Part 63.6640(a), Item 2 of Table 2b of Subpart ZZZZ, Item 10 of Table 6 of Subpart ZZZZ, and Air Title V Permit No. 1000-00005 modified September 27, 2016)
- 3.B.12 For Emission Points AA-055 through AA-064, the permittee shall maintain the temperature of each engine such that the 4-hour rolling average of the catalyst inlet temperature is greater than or equal to 450 degrees F and less than or equal to 1350 degrees F. The permittee shall also maintain the catalyst such that the pressure drop across the catalyst does not change more than 2 inches of water from the pressure drop

across the catalyst measured during the initial performance test. (Ref.: 40 CFR Part 63.6603(a), 40 CFR Part 63.6640(a), Item 2 of Table 2b of Subpart ZZZZ, and Item 10 of Table 6 of Subpart ZZZZ)

- 3.B.13 For Emission Points AA-086 through AA-091 and AA-093 through AA-105, Particulate Matter (PM) emissions are limited to 10,270 pounds/test (lb/test) and 24.4 tons per year (tpy); Particulate Matter of ten microns or less (PM10) emissions are limited to 6,060 lb/test and 14.4 tpy; Sulfur Dioxide (SO₂) emissions are limited to 2,520 lb/test and 39.4 tpy; Nitrogen Oxides (NO_x) emissions are limited to 2,520 lb/test and 39.4 tpy; Carbon Monoxide (CO) emissions are limited to 558,600 lb/test and 1,300 tpy; and Volatile Organic Compound (VOC) emissions are limited to 50 lb/test and 39.4 tpy. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued March 26, 2001 and Modified August 6, 2007)
- 3.B.14 For Emission Points AA-086, AA-087, AA-088, AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103, the permittee is allowed to use Liquid Hydrogen (LH₂)/Liquid Oxygen (LOX) and hydrocarbon fuels for engine testing. Testing of other similar fuels and oxidizers is allowed (e.g. Hydrogen Peroxide) by demonstrating compliance with the lbs/test limitations for PM, PM10, SO₂, NO_x, CO and VOC by using the NASA-Lewis combustion computer model or equivalent as specified in Condition 3.B.15. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued March 26, 2001 and Modified August 6, 2007)
- 3.B.15 For Emission Points AA-086, AA-087, AA-088, AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103, when testing hydrocarbon fuels, the permittee shall generate a modeling run using the NASA-LEWIS chemical equilibrium computer program or an equivalent version for each test by inputting the following parameters: reactant fuel, oxidizer and the weight percentages for each. However, if the fuel/oxidizer ratio and quantity of propellant is identical for a number of a series of tests, then the permittee can perform a single representative modeling run to generate the emission rates for the tests. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued March 26, 2001 and Modified August 6, 2007)
- 3.B.16 For Emission Points AA-086, AA-087, AA-088, AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103, the permittee shall limit the sulfur content in the LOX/RP-1 propellant to 0.05% sulfur by weight. (Ref.: Air Title V Operating Permit issued February 5, 1998)
- 3.B.17 Emission Point AA-115 is subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ. (Ref.: 40 CFR 60.4230(a)(4)(iv))
- 3.B.18 For Emission Point AA-115, Nitrogen Oxide (NO_x) emissions are limited to 2.0 grams per horsepower-hour (g/bhp-hr) or 160 ppmvd @ 15% O₂. Carbon Monoxide (CO)

emissions are limited to 4.0 g/bhp-hr or 540 ppmvd @ 15% O₂, and Volatile Organic Compound (VOC) emissions are limited to 1.0 g/bhp-hr or 86 ppmvd @ 15% O₂. The engine must be operated and maintained such that it achieves these emission standards over the entire life of the engine. (Ref: 40 CFR Part 60.4233(e), 60.4234, and Table 1 of Subpart JJJJ)

- 3.B.19 For Emission Point AA-115, the permittee must install and operate a non-resettable hour meter on the emergency engine. (Ref: 40 CFR 60.4237(a))
- 3.B.20 For Emission Points AA-080 through AA-082, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCC. (Ref. 40 CFR Part 63.11110, 40 CFR Part 63.11111, and 40 CFR Part 63.11112)
- 3.B.21 For Emission Points AA-080 through AA-082, the permittee must, at all times, 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (Ref.: 40 CFR Part 63.11115(a))
- 3.B.22 For Emission Points AA-080 through AA-082, the permittee shall comply with the following requirements:
- (a) The combined gasoline throughput through the gasoline dispensing units shall not exceed 10,000 gallons per month.
 - (b) Gasoline may not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills;
 - (2) Clean up spills as expeditiously as practicable;
 - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

- (c) All requirements of 40 CFR Part 63, Subpart CCCCCC must be met upon startup of the affected gasoline dispensing unit.
- (d) Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with Condition 3.22(b)(3).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10); 40 CFR Part 63.11116(a), (c), and (d); and 63.11113(a)(2))

- 3.B.23 For the entire facility, the permittee is limited to an individual HAP emission rate of 9.4 tons/year and a combined total HAP emission rate of 24.4 tons/year for any consecutive 12-month period. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified August 6, 2007 and Federally Enforceable Title V Permit issued December 5, 2012)

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. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)
- 5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-015 through AA-020, AA-022, and AA-023	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.1	Operating hours	Operations monitoring
	40 CFR 60.4211(a)	5.B.2	NMHC + NOx, HC, NOx, CO, and PM	Operational Requirements
	40 CFR 60.4211(c)(1)	5.B.3	HC, NOx, CO, and PM	Compliance Demonstration via installation of NSPS-Certified Engine(s)
		5.B.4		
	40 CFR 60.4211(f)	5.B.5	Operations	Emergency Operational Requirements
40 CFR 60.4211(g)(3)	5.B.6	NMHC + NOx, HC, NOx, CO, and PM	Operational Requirements	
AA-086 through AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103	PSD Construction Permit Issued March 26, 2001; PSD Construction Permit Issued Modified August 6, 2007; and Title V Operating Permit Modified herein	5.B.7	PM, PM10, SO2, NOx, CO, VOC, and HAPs	Test recordkeeping requirements
AA-090, AA-091, AA-093, AA-094, AA-097, AA-098, AA-102, AA-104, and AA-105		5.B.8		Flare recordkeeping requirements
AA-002, AA-012 through AA-020, AA-023, AA-024, AA-027, AA-051 through AA-064, and AA-115	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)	5.B.9	Fuels	Fuel recordkeeping requirements
AA-002,	11 Miss. Admin. Code Pt.	5.B.10	Operating hours	Operations monitoring

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-012, AA-013, AA-014, AA-024, AA-027, AA-051 through AA-064, and AA-115	2, R. 6.3.A(3)			
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)	5.B.11	HAPs	Recordkeeping requirements for all coatings, adhesives, solvents or other HAP containing materials and emission rates
AA-002, AA-012, AA-013, AA-024, and IA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)	5.B.12	Operations	Emergency operations monitoring
AA-055 through AA-064	NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ 40 CFR Part 63.6615, 40 CFR Part 63.6640(a), Item 4 of Table 3 to Subpart ZZZZ, Item 10.a.i. of Table 6 to Subpart ZZZZ, 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2), and Air Title V Permit No. 1000-00005 modified September 27, 2016	5.B.13	CO	Conduct performance stacks tests, triennially, or every 1,100 hours of operations, whichever comes first.
AA-051 through AA-064	NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ 40 CFR Part 63.6615, 40 CFR Part 63.6640(a), Item 4 of Table 3 to Subpart ZZZZ, Item 10.a.i. of Table 6 to Subpart ZZZZ, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.14	CO	Conduct performance stacks tests, triennially, or every 8,760 hours of operations, whichever comes first.
	NESHAP for Stationary Reciprocating Internal Combustion Engines	5.B.15	CO	Performance testing requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
	(RICE), 40 CFR Part 63, Subpart ZZZZ			
	40 CFR Part 63.6620(a) and Item 3 of Table 4 to Subpart ZZZZ			
	40 CFR Part 63.6625(b)	5.B.16	CO	CPMS requirements
	40 CFR Part 63.6625(g)	5.B.17	CO	Open crankcase filtration emission control system
	40 CFR Part 63.6640(b)	5.B.18	CO	Catalyst changes
	40 CFR Part 63.6655(a)-(b)	5.B.19	CO	Keep records of notifications, reports, malfunctions, performance tests, maintenance, and corrective actions.
	40 CFR Part 63.6655(d)	5.B.20	CO	Keep records of continuous compliance
	40 CFR Part 63.6660	5.B.21	CO	Keep records for five years
AA-115	40 CFR Part 63.6665 and Table 8 of Subpart ZZZZ	5.B.22	CO	General Provisions
	NSPS for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ	5.B.23	Operations	Compliance Demonstration via installation of NSPS-Certified Engine and Maintenance recordkeeping
	40 CFR Part 60.4243(a)(1) and (b)(1)			
	40 CFR 60.4243(d)	5.B.24	Operations	Emergency Operations
AA-080 through AA-082	40 CFR 60.4245(a)-(b)	5.B.25		General Recordkeeping
	NESHAP for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC	5.B.26	Area Source HAPs	Records of gasoline dispensing operations
	40 CFR Part 63.11115(b), 40 CFR Part 63.11116(b), and 40 CFR Part 63.11125(d)			

5.B.1 For Emission Points AA-015 through AA-020, AA-022, and AA-023, the permittee shall keep records of the hours of operation on a monthly basis as recorded through the non-resettable hour meter required by 40 CFR Part 60.4209(a). (Ref.: Air Title V Permit issued herein)

5.B.2 For Emission AA-015 through AA-020, AA-022, and AA-023, the permittee shall operate and maintain each emergency 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 may only change those settings that are permitted by the manufacturer. The permittee shall also meet the applicable requirements of 40 CFR Part 89. (Ref.: 40 CFR Part 60.4211(a))

- 5.B.3 For Emission Points AA-015 through AA-020 and AA-022, the permittee must demonstrate compliance with emission standards specified in Condition 3.B.4. by purchasing engines certified according to 40 CFR Part 89, for the same model year and maximum engine power. Each engine must be installed and configured according to the manufacturer's specifications. (Ref.: 40 CFR Part 60.4211(c)(1))
- 5.B.4 For Emission Point AA-023, the permittee must demonstrate compliance with emission standards specified in Condition 3.B.5. by purchasing an engine certified according to 40 CFR Part 89, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. (Ref.: 40 CFR Part 60.4211(c)(1))
- 5.B.5 For Emission Points AA-015 through AA-020, AA-022, and AA-023, the permittee must operate the emergency stationary engines according to the requirements cited below. In order for the engines to be considered emergency stationary engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the engines are not operated according to these requirements, the engines will not be considered emergency engines under 40 CFR Part 60, Subpart IIII and must meet all requirements for non-emergency engines.
- (a) There is no time limit on the use of the emergency engines in emergency situations.
 - (b) The engines may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of engine beyond 100 hours per calendar year.
 - (c) The engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing.
- (Ref.: 40 CFR Part 60.4211(f))
- 5.B.6 For Emission Points AA-015 through AA-020, AA-022, and AA-023, if the engine and control device are not installed, configured, operated, and maintained and control device according to the manufacturer's emission-related written instructions, or if emission-related settings are changed in a way that is not permitted by the manufacturer, then a maintenance plan and records of conducted maintenance must be kept, and must, to the

extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, an initial performance test must be conducted to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer.

For Emission Points AA-015 through AA-020, and AA-022, subsequent performance testing following the initial performance test must be conducted every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (Ref.: 40 CFR Part 60.4211(g)(2) and (3))

- 5.B.7 For Emission Points AA-086, AA-087, AA-088, AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103, the permittee shall maintain a record of each test conducted, the duration of the test, the fuels used and calculate the emission rates for PM, PM10, SO₂, NO_x, CO, VOC, and HAPs. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007, and Title V Operating Permit Modified herein)
- 5.B.8 For Emission Points AA-090, AA-091, AA-093, AA-094, AA-097, AA-098, AA-102, AA-104 and AA-105, the permittee shall record the duration of the flaring operation, the gases flared and calculate the emissions for all pollutants. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007, and Title V Operating Permit Modified herein)
- 5.B.9 For Emission Points AA-002, AA-012 through AA-020, AA-022, AA-023, AA-024, AA-027, AA-051 through AA-064, and AA-115, the permittee shall keep records of all fuels burned. These records shall consist of fuel type, quality & quantity, the sulfur content (% by weight), and the heating value (BTU/gal). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.B.10 For Emission Points AA-002, AA-012, AA-013, AA-014, AA-024, AA-027, AA-051 through AA-064, and AA-115, the permittee shall keep records of the hours of operation on a monthly basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.B.11 For the entire facility, the permittee shall maintain sufficient records to document:
- (a) The identification of each coating, adhesive, solvent or other HAP containing material and the total gallons of each coating, adhesive, solvent or other HAP containing material used on a monthly basis and in each consecutive 12-month period on a rolling basis;

- (b) The HAP content(s) of each coating, adhesive, solvent or other HAP containing material used;
- (c) The emission rate of each individual HAP and the total HAP emission rate in tons/yr for each consecutive 12-month period on a rolling basis.

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

5.B.12 For Emission Points AA-002, AA-012, AA-013, AA-024, and IA-001, the permittee shall keep records of the hours of non-emergency and emergency operation, including what classified the operation as emergency, to verify that the emergency stationary engines are being operated according to the requirements of Condition 3.B.7. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

5.B.13 For Emission Points AA-051 through AA-054, the permittee shall conduct subsequent performance tests every 1,100 hours or 3 years, whichever comes first, to demonstrate that the engine is meeting the applicable CO limit from Condition 3.B.9. If a unit is non-operational at the time the performance test is due, the permittee need not start up the engine solely to conduct the performance test. The performance test shall be conducted when the engine is started up again. The permittee shall use EPA Reference Method 10 to determine the CO emissions.

A test protocol shall be submitted at least thirty (30) days prior to the proposed test date to insure that all test methods and procedures are acceptable to MDEQ Compliance Division. (Ref.: 40 CFR 63.6615, 40 CFR 63.6640(a), Item 4 of Table 3 to Subpart ZZZZ, Item 10.a.i. of Table 6 to Subpart ZZZZ, 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2), and Air Title V Permit No. 1000-00005 modified September 27, 2016)

5.B.14 For Emission Points AA-055 through AA-064, the permittee shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first, to demonstrate that the engine is meeting the applicable CO limit from Condition 3.B.9. If a unit is non-operational at the time the performance test is due, the permittee need not start up the engine solely to conduct the performance test. The performance test shall be conducted when the engine is started up again. The permittee shall use EPA Reference Method 10 to determine the CO emissions.

A test protocol shall be submitted at least thirty (30) days prior to the proposed test date to insure that all test methods and procedures are acceptable to MDEQ Compliance Division. (Ref.: 40 CFR 63.6615, 40 CFR 63.6640(a), Item 4 of Table 3 to Subpart ZZZZ, Item 10.a.i. of Table 6 to Subpart ZZZZ, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

5.B.15 For Emission Points AA-051 through AA-064, each CO performance test must be conducted in accordance with the following requirements:

- (a) The sampling port location and the number/location of traverse points at the exhaust of the stationary RICE must be selected and the O₂ concentration of the stationary RICE exhaust at the sampling port location determined using Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) (heated probe not necessary)
 - (1) For CO, O₂, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
 - (2) Measurements to determine O₂ concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
- (b) The moisture content of the stationary RICE exhaust at the sampling port location must be measured using Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
- (c) The CO at the exhaust of the stationary RICE must be measured using Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005)^{ac}, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03;
 - (i) CO concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the three 1-hour or longer runs

(Ref.: 40 CFR Part 63.6620(a) and Item 3 of Table 4 to Subpart ZZZZ)

5.B.16 For Emission Points AA-051 through AA-064, the permittee shall operate and maintain each continuous parameter monitoring system (CPMS) according to the requirements below:

- (a) A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below. As specified in 40 CFR Part 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control

procedures alternative to those specified below in the site-specific monitoring plan.

- (1) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - (2) Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
 - (3) Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - (4) Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR Part 63.8(c)(1)(ii) and (c)(3); and
 - (5) Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR Part 63.10(c), (e)(1), and (e)(2)(i).
- (b) Each CPMS must be operated and maintained in continuous operation according to the procedures in the permittee's site-specific monitoring plan.
- (c) The CPMS must collect data at least once every 15 minutes (see also 40 CFR Part 63.6635).
- (d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (e) The CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan must be conducted at least annually.
- (f) A performance evaluation of each CPMS must be conducted in accordance with the permittee's site-specific monitoring plan.

(Ref.: 40 CFR 63.6625(b))

5.B.17 For Emission Points AA-051 through AA-064, the permittee shall operate each open crankcase ventilation system that reduces emissions from the crankcase according to the manufacturer's specified maintenance requirements for operating and maintaining the crankcase ventilation systems and replacing the crankcase filters, or request that DEQ approve different maintenance requirements that are as protective as the manufacturer's requirements. (Ref.: 40 CFR 63.6625(g))

5.B.18 For Emission Points AA-051 through AA-064, if a catalyst change occurs, the permittee shall conduct a performance test to demonstrate that the emission limitations are being met and shall re-establish the values of the operating parameters measured during the initial performance test. (Ref.: 40 CFR 63.6640(b))

5.B.19 For Emission Points AA-051 through AA-064, the permittee must keep the following records:

- (a) A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted, according to the requirement in 40 CFR Part 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 40 CFR Part 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 Condition 3.B.10, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (f) Records described in 40 CFR Part 63.10(b)(2)(vi) through (xi) for each CPMS.
- (g) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3).
- (h) Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR Part 63.8(f)(6)(i), if applicable.

(Ref: 40 CFR Part 63.6655(a)-(b))

5.B.20 For Emission Points AA-051 through AA-064, the permittee must keep the records required in Table 6 of 40 CFR Part 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to the engine. (Ref: 40 CFR Part 63.6655(d))

5.B.21 For Emission Points AA-051 through AA-064, records must be kept in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

Each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Part 63.10(b)(1). (Ref: 40 CFR Part 63.6660)

- 5.B.22 For Emission Points AA-051 through AA-064, the permittee is subject to the applicable General Provisions in Table 8 to the Subpart ZZZZ Tab. (Ref: 40 CFR Part 63.6665)
- 5.B.23 For Emission Point AA-115, the permittee must operate and maintain the certified emergency engine and control device according to the manufacturer's emission-related written instructions and must keep records of conducted maintenance to demonstrate compliance. No performance testing is required. The applicable requirements as specified in 40 CFR Part 1068, Subparts A through D, must also be met. If the engine settings are adjusted according to and consistent with the manufacturer's instructions, the engine will not be considered out of compliance. (Ref.: 40 CFR 60.4243(a)(1) and (b)(1))
- 5.B.24 For Emission Point AA-115, the permittee must operate the emergency stationary engine according to the requirements cited below. In order for the engine to be considered an emergency stationary engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the engine is not operated according to these requirements, the engine will not be considered emergency engines under 40 CFR 60, subpart JJJJ and must meet all requirements for non-emergency engines.
- (a) There is no time limit on the use of the emergency stationary engine in emergency situations.
 - (b) The engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of each engine beyond 100 hours per calendar year.
 - (c) The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing.

(Ref.: 40 CFR 60.4243(d))

5.B.25 For Emission Point AA-115, the permittee shall keep records of the following information:

- (a) All notifications submitted to comply with 40 CFR 60, subpart JJJJ and all documentation supporting any notification;
- (b) Maintenance conducted on the engine; and
- (c) Documentation from the manufacturer that the engine is certified to meet the applicable emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060.
- (d) The hours of operation of the engine that is recorded through the non-resettable hour meter.
- (e) How many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(Ref: 40 CFR 60.4245(a)-(b))

5.B.26 For Emission Points AA-080 through AA-082, the permittee shall meet the following recordkeeping requirements:

- (a) Must have records available within 24 hours of a request by DEQ to document gasoline throughput.
- (b) Must keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- (c) Must keep records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 3.B.21 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR Part 63.11115(b), 63.11116(b), and 63.11125(d))

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-086 through AA-091 and AA-093 through AA-105	PSD Permit Issued March 26, 2001 and Modified August 6, 2007	5.C.1	PM, PM10, SO2, NOx, CO, and VOC	Submit semiannual reports of testing information and emissions
		5.C.2		Submit reports of exceedances
AA-002, AA-012, AA-013, AA-014, AA-024, AA-027, AA-051 through AA-064, AA-085 through AA-091, AA-093 through AA-105, and AA-115	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)	5.C.3	HAPs	Submit semiannual reports of emissions
AA-051 through AA-064	40 CFR 63.6645(g)	5.C.4	Area Source HAPs	Submit Notifications of Intent
	40 CFR 63.6645(h)	5.C.5		Submit Notifications of Compliance Status
	40 CFR Part 63.6640(e) and 40 CFR Part 63.6650(c) and (e)	5.C.6		Submit semiannual compliance reports
AA-080 through AA-082	40 CFR Part 63.11115(b) and 40 CFR Part 63.11126(b)	5.C.7	Area Source HAPs	Submit report of deviations

5.C.1 The permittee shall submit semiannual reports in accordance with Condition 5.A.4 of the following information:

- (a) The number and duration of the tests on a monthly basis for any consecutive 12-month period.
- (b) The total emission rates for PM, PM₁₀, NO_x, CO, VOC and HAPs from the tests calculated on a monthly basis for any consecutive 12-month period in tons/year. The emissions from flares shall be calculated on a yearly basis and included in the total tons/year for the facility.
- (a) The results of the highest lb/test number for PM, PM₁₀, NO_x, CO and VOC since the last reporting period, to demonstrate compliance with the short term allowable lbs/test number.

(Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued March 26, 2001 and Modified August 6, 2007)

- 5.C.2 For Emission Points AA-086 through AA-091 and AA-093 through AA-105, the permittee shall report any exceedance of the limitations outlined in this permit to MDEQ no later than 10 days following the end of the month in which the exceedance occurred and shall report the cause of the exceedance and the action(s) taken and/or to be taken to correct it. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued March 26, 2001 and Modified August 6, 2007)
- 5.C.3 The permittee shall submit semiannual compliance reports summarizing the monthly and rolling, consecutive 12-month total HAP emission rates as calculated in Conditions 5.B.7, 5.B.8, 5.B.10, and 5.B.11, in accordance with Condition 5.A.4. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.C.4 For Emission Points AA-051 through AA-064, the permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. (Ref.: 40 CFR 63.6645(g))
- 5.C.5 For Emission Points AA-051 through AA-064, the permittee shall submit a Notification of Compliance Status before the close of business on the 60th day following the completion of the performance stack test for each engine. (Ref.: 40 CFR 63.6645(h))
- 5.C.6 For Emission Points AA-051 through AA-064, the permittee shall submit semiannual compliance reports in accordance with Condition 5.A.4 that include the following information:
- (a) Company name and address.
 - (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (c) Date of report and beginning and ending dates of the reporting period.
 - (d) If an engine had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR Part 63.6605(b), including actions taken to correct a malfunction.

- (e) If there are no deviations from any applicable emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period.
- (f) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (g) For each deviation from an emission or operating limitation, the following information must also be included:
 - (1) The date and time that each malfunction started and stopped.
 - (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
 - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - (9) A brief description of the stationary RICE.
 - (10) A brief description of the CMS.
 - (11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(h) Each instance when the applicable requirements of Table 8 of Subpart ZZZZ were not met.

(Ref.: 40 CFR Part 63.6640(e) and 40 CFR Part 63.6650(c) and (e))

5.C.7 For Emission Points AA-080 through AA-082, the permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Condition 3.B.21, including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred. (Ref.: 40 CFR Part 63.11115(b) and 63.11126(b))

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://www.ecfr.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. Episodes	Regulations for the Prevention of Air Pollution Emergency
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
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

List of Regulations Referenced in this Permit

The full text of the regulations referenced in this permit may be found on-line at <http://www.deq.state.us.us> and <http://ecfr.gpoaccess.gov>, or the Mississippi Department of Environmental Quality (MDEQ) will provide a copy upon request. A list of regulations referenced in this permit is shown below:

11 Miss. Admin. Code Pt. 2, Ch. 1, Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended December 14, 2011)

11 Miss. Admin. Code Pt. 2, Ch. 6, Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Air Emissions Operating Permit Regulations for the Purpose of Title V of the Federal Clean Air Act (Amended December 14, 2011)

40 CFR Part 82 - Title VI of the Clean Air Act (Stratospheric Ozone Protection)

40 CFR 63, Subpart A – General Provisions

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR 60, Subpart A – General Provisions

40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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