

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: December 5, 2012

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: November 30, 2017

Permit No.: 1000-00005

Modified: SEP 27 2016

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX B 40 CFR 82 - PROTECTION OF STRATOSPHERIC OZONE

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

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

**APPENDIX E 40 CFR 63, SUBPART ZZZZ ALTERNATIVE OPERATING
LIMITATION APPROVAL**

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 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).)
- 1.5 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 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).)
- 1.7 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 judgements where such judgements 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.)

- 1.8 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).)

- 1.9 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.)
- 1.10 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. 6.3C(2).)
- 1.11 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).)
- 1.12 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).)
- 1.13 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).)
- 1.14 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).)
- 1.15 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.)
- 1.16 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).)
- 1.17 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).)

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

established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

(f) any change in ownership of the stationary source."

- 1.20 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).)
- 1.21 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).)
- 1.22 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.)
- 1.23 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.)

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

- (1) Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

- (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
- (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
 - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
 - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
 - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
 - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
 - (3) In the event this startup and shutdown provision conflicts with another

applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
 - (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-002	300 KW (2.82 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (Institutional Emergency Compression Ignition (CI) RICE >500 HP) (Facility Ref. No. 1201-3A)
AA-012	100 KW (0.94 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (Institutional Emergency CI RICE <500 HP) (Facility Ref. No. 2105-10)
AA-013	300 KW (2.84 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (Institutional Emergency CI RICE >500 HP) (Facility Ref. No. 2201-1)
AA-014	100 KW (1.3 MMBTU/hr Heat Input) Natural Gas Fired Emergency Generator (4 Stroke Lean Burn (4SLB) Spark Ignition (SI) RICE <500 HP) (Facility Ref. No. 8100-1 NG)
AA-015	600 KW (5.97 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 8000-IN)
AA-016	600 KW (5.97 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 8000-2S)
AA-017	800 KW (7.78 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 1100-1)
AA-018	800 KW (7.78 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 1100-2)
AA-019	800 KW (7.78 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 1100-3)
AA-020	500 KW (4.79 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 1201-1)
AA-021	250 KW (2.65 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE <500 HP) (Facility Ref. No. 1110-1)
AA-022	400 KW (3.78 MMBTU/hr Heat Input) Diesel and/or Natural Gas Fired Emergency Generator (CI RICE >500 HP) (Facility Ref. No. 2204-1)
AA-023	300 KW (3.19 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (CI RICE <500 HP) (Facility Ref. No. 3204-1)
AA-024	200 KW (1.88 MMBTU/hr Heat Input) Diesel Fired Emergency Generator (Institutional Emergency CI RICE <500 HP) (Facility Ref. No. 3418-1)
AA-027	125 KW (1.7 MMBTU/hr Heat Input) Natural Gas Fired Emergency Generator (4SLB SI RICE <500 HP) (Facility Ref. No. 9101-2)
AA-051	1,500 KW (14.94 MMBTU/hr Heat Input) Diesel Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-2)
AA-052	1,500 KW (14.94 MMBTU/hr Heat Input) Diesel Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-3)
AA-053	1,500 KW (14.94 MMBTU/hr Heat Input) Diesel Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-4)

Emission Point	Description
AA-054	1,500 KW (14.94 MMBTU/hr Heat Input) Diesel Fired Generator (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-5)
AA-055	3,475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-6)
AA-056	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-7)
AA-057	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-8)
AA-058	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-9)
AA-059	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-10)
AA-060	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-11)
AA-061	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-12)
AA-062	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-13)
AA-063	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-14)
AA-064	3475 KW (34.611 MMBTU/hr Heat Input) Diesel Fired Engine (CI RICE >500 HP w/displacement >30 liters/cylinder) (Facility Ref. No. 4400-15)
AA-071	250 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 1201-3B)
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	2,000 Gallon Diesel Fuel Storage Tank (Facility Ref. No. 4400-36)
AA-079	15,000 Gallon Rocket Propellant (RP-1) Fuel Storage Tank (Facility Ref. No. B2-RP1)
AA-080	Gasoline Dispensing Operation With 8,000 Gallon Storage Tank (Tank 1)
AA-081	Gasoline Dispensing Operation With 8,000 Gallon Storage Tank (Tank 2)
AA-082	Ethanol Dispensing Operation With 8,000 Gallon Tank (Tank 3)
AA-083	Hydrochlorofluorocarbon Distillation and Clean Line Verification Process
AA-084	Abrasive Blast Operations

Emission Point	Description
AA-085	Miscellaneous Paint And Solvent Usage
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-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)
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-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-099	B-Complex, Dual Position Test Stand (Facility Ref. B-1/B-2)
AA-100	A-1 Test Stand and Chemical Steam Generating Units (Facility Ref. A-1)
AA-101	A-2 Test Stand and Chemical Steam Generating Units (Facility Ref. A-2)
AA-102	A-1 Test Stand Flare (Facility Ref. No. 4120C-1)
AA-103	A-3 Test Stand and Chemical Steam Generating Units (Facility Ref. A-3)
AA-104	A-3 Test Stand Flare #1
AA-105	A-3 Test Stand Flare #2
AA-106	35,000 Gallon Isopropyl Alcohol Storage Tank
AA-107	35,000 Gallon Isopropyl Alcohol Storage Tank
AA-108	Cryogenic Storage Hydrogen Flare Stack #2
AA-109	Fuel Dispensing Operation with a 8,000 Gallon Biodiesel Fuel Storage Tank (Facility Ref. 00975175)
AA-110	Fuel Dispensing Operation with a 12,000 Gallon Diesel Storage Tank (Facility Ref. 2105-TBD)
AA-111	20,000 Gallon Diesel Storage Tank (Facility Ref. 2105-TBD)
AA-112	20,000 Gallon Diesel Storage Tank (Facility Ref. 4400-TBD)
AA-113	20,000 Gallon Diesel Storage Tank (Facility Ref. 4400-TBD)

Emission Point	Description
AA-114	TEA/TEB Training Facility
IA-001	Insignificant 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)

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 thru AA-024, AA-027 & IA-001	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.1	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
AA-015 thru AA-023	NSPS Subpart IIII, 40 CFR 60	3.B.2		
AA-015 thru AA-019, AA-020 and AA-022	40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2)	3.B.3	NMHC + NOx CO PM	6.4 g/KW-hr 3.5 g/kW-hr 0.2 g/kW-hr

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-021 and AA-023	40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2)	3.B.3	NMHC + NOx CO PM	4.0 g/KW-hr 3.5 g/kW-hr 0.2 g/kW-hr
AA-015 thru AA-023	NSPS Subpart IIII, 40 CFR 60.4207(a) & (b)	3.B.4	Fuel Requirements	As specified in 40 CFR 80.510(a) & (b)
AA-002, AA-012, AA-013, AA-024, & IA-001	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6585, 40 CFR 63.6590(a)(1)(iii), 40 CFR 63.6640(f), & 40 CFR 63.6675	3.B.5	HAP	MACT applicability. Not affected by the requirements of this standard, except to meet the definition of emergency stationary RICE.
AA-014 thru AA-023 & AA-027	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6585, 40 CFR 63.6590(a)(2)(iii), & 40 CFR 63.6590(c)(1)	3.B.6	HAP	MACT applicability. Must meet the requirements of this MACT by meeting the requirements of 40 CFR 60, Subpart IIII or Subpart JJJJ, as applicable. No further requirements under this part.
AA-051 thru AA-064	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6585, 40 CFR 63.6590(a)(1)(iii), 40 CFR 63.6603(a), 40 CFR 63.6640(a) & Tables 2b, 2d & 6	3.B.7	HAP	Limit the concentration of CO in the exhaust to 23 ppmvd at 15 percent O ₂ OR reduce CO emissions by 70 percent or more
AA-051 thru AA-064	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.8	PM	$E=0.8808 \cdot T^{-0.1667}$ or as otherwise limited by facility modification restrictions
AA-002, AA-012 thru AA-024, AA-027 and AA-051 thru AA-064	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.9	Sulfur Dioxide (SO ₂)	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
AA-086 thru AA-091 and AA-093 thru AA-105	Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007.	3.B.10, 3.B.11, 3.B.12	PM PM ₁₀ SO ₂ NOx CO	10,270 lbs/test motor fired, not to exceed 24.4 tons/yr. 6,060 lbs/test motor fired, not to exceed 14.4 tons/yr. 2,520 lbs/test motor fired, not to exceed 39.4 tons/yr 2,520 lbs/test motor fired, not to exceed 39.4 tons/yr 558,600 lbs/test motor fired, not to exceed

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
			VOC	1300 tons/year. 50 lbs/test motor fired, not to exceed 39.4 tons/year
			Opacity	40%
AA-086 thru AA-089, AA-095, AA-096, AA-099, AA-100, AA-101, and AA-103	Federally Enforceable Restriction established in the TV Permit Issued on February 5, 1998	3.B.13	Fuel Sulfur Limit	The permittee shall limit the sulfur content in the LOX/RP-1 propellant to 0.05% sulfur by weight.
Facility-Wide	Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007 and Federally Enforceable Title V Permit issued on December 5, 2012	3.B.14	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-024, AA-027 and IA-001, the maximum permissible emission of ash and/or particulate matter shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)
- 3.B.2 For Emission Points AA-015 through 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. (Ref. 40 CFR 60.4200(a)(2))
- 3.B.3 Emission Points AA-015 through AA-023 must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. The certification emission standards for new nonroad compression ignition engines are for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants. (Ref.: 40 CFR 60.4205(b) and 40 CFR 4202(a)(2))
- 3.B.4 For Emission Points AA-015 through AA-023, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(a). Beginning October 1, 2010, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. (Ref.: 40 CFR 60.4207(a) & (b))
- 3.B.5 Emission Points AA-002, AA-012, AA-013, AA-024 and IA-001 are existing institutional emergency stationary RICE located at an area source of HAP emissions

that are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ but must meet the definition of emergency stationary RICE, which includes operating according to the following:

- (a) There is no limit on the use of the engine during emergency situations.
- (b) The engine may be operated for a maximum of 100 hours per calendar year 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 MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by this paragraph.
- (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. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

If the emergency engine is not operated according to the requirements in (a) - (c) above, the engine will not be considered an emergency engine under this subpart and will need to meet any applicable requirements for a non-emergency engine under 40 CFR 63, Subpart ZZZZ.

(Ref.: 40 CFR 63.6585, 63.6590(a)(1)(iii), 63.6640(f) and 63.6675)

3.B.6 Emission Points AA-014 through AA-023 and AA-027 are subject to the NESHAP for Stationary RICE, 40 CFR Part 63, Subpart ZZZZ. These units are new institutional emergency stationary RICE located at an area source of HAP emissions that are required to meet the requirements of this standard by meeting the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines or 40 CFR Part 60, Subpart JJJJ for spark ignition engines, as applicable. No further requirements of this standard apply to the emission units. (Ref.: 40 CFR 63.6585, 63.6590(a)(2)(iii), and 63.6590(c)(1))

3.B.7 Emission Points AA-051 through AA-064 are subject to the NESHAP for Stationary

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RICE, 40 CFR Part 63, Subpart ZZZZ. These units are existing compression ignition stationary RICE located at an area source of HAP emissions. Beginning May 3, 2014, the permittee shall limit the concentration of CO in the units' exhaust to 23 ppmvd at 15 percent O₂ OR reduce CO emissions by 70 percent or more, except during startup. The permittee shall minimize the units' startup time to a period needed for appropriate and safe loading of the RICE, not to exceed 30 minutes, and shall minimize the units' time spent at idle during startup.

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 °F and less than or equal to 1350 °F per the approval for an alternative operating limitation found in Appendix "E" of this permit. 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. All other engines shall comply with the applicable operating limitations in Table 2b. (Ref.: 40 CFR 63.6585, 63.6590(a)(1)(iii), 63.6603(a), 63.6625(h), 63.6640(a) and Tables 2b, 2d, and 6 of Subpart ZZZZ.)

- 3.B.8 For Emission Points AA-051 through AA-064, the maximum permissible emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship

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

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

- 3.B.9 For Emission Points AA-002, AA-012 thru AA-024, AA-027 and AA-051 thru AA-064, the maximum discharge of sulfur dioxides shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)
- 3.B.10 For Emission Points AA-086 thru AA-091 and AA-093 thru AA-105, the permittee shall comply with the limits established in their Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007.

Units	Particulate Matter (PM)	Particulate Matter (PM ₁₀)	Sulfur Dioxide (SO ₂)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Volatile Organic Compounds (VOCs)
lb/test	10,270	6,060	2,520	2,520	558,600	50

tons/yr	24.4	14.4	39.4	39.4	1300	39.4
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(Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007)

- 3.B.11 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.12. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007)
- 3.B.12 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 on March 26, 2001 and Modified on August 6, 2007)
- 3.B.13 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.: Federally Enforceable Limitation Established in the February 5, 1998 Title V Permit)
- 3.B.14 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 on August 6, 2007 and Federally Enforceable Title V Permit issued on 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 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2 & 1.19	SO ₂	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions

- 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.
- 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 as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

B. Specific Monitoring and Recordkeeping Requirements

- 5.B.1 For Emission Points AA-015 through AA-023, the permittee must install a non-resettable hour meter prior to startup of each engine. (Ref.: 40 CFR 60.4209(a))
- 5.B.2 For Emission Points AA-015 through AA-023, the permittee shall operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply. (Ref.: 40 CFR 60.4211(a))
- 5.B.3 For Emission Points AA-015 through AA-023, the permittee shall purchase an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. (Ref.: 40 CFR 60.4211(c))
- 5.B.4 For Emission Points AA-015 through AA-023, emergency stationary ICE may be operated according to the following:
 - (a) There is no limit on the use of the engine during emergency situations.
 - (b) The engine may be operated for a maximum of 100 hours per calendar year 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 MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by this paragraph.

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

If the emergency engine is not operated according to the requirements in (a) - (c) above, the engine will not be considered an emergency engine under this subpart and will need to meet any applicable requirements for a non-emergency engine under 40 CFR 63, Subpart ZZZZ.

(Ref.: 40 CFR 60.4211(f))

- 5.B.5 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 all pollutants. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on August 6, 2007)
- 5.B.6 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)
- 5.B.7 For Emission Points AA-002, AA-012 through AA-024, AA-027, and AA-051 through AA-064, 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.8 For Emission Points AA-002, AA-012 through AA-024, AA-027, and AA-051 through AA-064, the permittee shall keep records of the hours of operation on a monthly basis. The permittee shall use this information to calculate HAP emissions 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.9 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.10 For Emission Points AA-002, AA-012, AA-013, AA-024, and IA-001, beginning May 3, 2013, 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 RICE are being operated according to the requirements of 40 CFR 63.6640(f).

5.B.11 For Emission Points AA-051 through AA-064, the permittee shall conduct all initial performance tests and initial compliance demonstrations in accordance with Tables 4 and 5 and §63.6620(d) through (i) of Subpart ZZZZ, as applicable, no later than October 30, 2014. The applicable operating limitations from Table 2b of Subpart ZZZZ must be established during the initial performance test. 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. An initial performance test is not required on units for which a performance test has been previously conducted as long as the test meets the following conditions:

- (a) The test was conducted using the same methods specified in Tables 4 and 5 of Subpart ZZZZ and the methods were followed correctly.
- (b) The test was conducted within the last 2 years.
- (c) The test must be reviewed and accepted by MDEQ.
- (d) No process or equipment changes have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrates compliance despite the process or equipment changes.

(Ref.: 40 CFR 63.6612, 63.6620(b)-(i), and 63.6630)

- 5.B.12 For Emission Points AA-051 through AA-064, the permittee shall conduct subsequent performance tests and demonstrate continuous compliance in accordance with Tables 3, 4, and 6 and §63.6620(d), (e), and (i) of Subpart ZZZZ; however, the subsequent performance tests for Emission Points AA-051 through AA-054 shall be completed every 1,100 hours of operation or 3 years, whichever comes first, in accordance with the approval of the alternative operating limitation established in Condition 3.B.7. 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. (Ref.: 40 CFR 63.6615, 63.6620, and 63.6640(a))
- 5.B.13 For Emission Points AA-051 through AA-064, if the permittee is required to install a continuous parameter monitoring system (CPMS) or alternatively elects to install a continuous emissions monitoring system (CEMS), as specified in Table 5 of Subpart ZZZZ, the permittee shall install, operate, and maintain each CEMS and CPMS according to the requirements in 40 CFR 63.6625(a) and (b), respectively, and shall monitor and collect data according to the requirements in 40 CFR 63.6635. (Ref.: 40 CFR 63.6625(a) and (b))
- 5.B.14 For Emission Points AA-051 through AA-064, beginning May 3, 2014, the permittee shall install either a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. The permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the crankcase ventilation systems and replacing the crankcase filters, or request that MDEQ approve different maintenance requirements that are as protective as the manufacturer's requirements. (Ref.: 40 CFR 63.6625(g))
- 5.B.15 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 still 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.16 For Emission Points AA-051 through AA-064, the permittee shall keep all records described in 40 CFR 63.6655(a), (b), and (d), as applicable. (Ref.: 40 CFR 63.6655)

C. Specific Reporting Requirements

- 5.C.1 The permittee shall submit semiannual reports which should contain 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.
- c. 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.

The reports shall be submitted in accordance with Condition 5.A.4. (Ref.: Federally Enforceable Prevention of Significant Deterioration Construction Permit Issued on March 26, 2001 and Modified on 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 on March 26, 2001 and Modified on August 6, 2007)
- 5.C.3 The permittee shall submit a report summarizing the results of tons/year HAP emission rates as calculated in Conditions 5.B.6, 5.B.8 and 5.B.9 in accordance with Condition 5.A.4 of the federally enforceable permit herein. (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 notify MDEQ in writing of which emission and operating limitation options in Condition 3.B.7 they have chosen to meet and whether a CEMS or CPMS is being used to demonstrate continuous compliance with the limitations no later than May 3, 2014. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.C.5 For Emission Points AA-051 through AA-064, the permittee shall submit a Notification of Intent to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the MDEQ, upon request, to review and approve the site-specific test plan required in 40 CFR 63.7(c) and to have an observer present during the test. (Ref.: 40 CFR 63.6645(a) and (g) and 63.9(e))
- 5.C.6 For Emission Points AA-051 through AA-064, the permittee shall submit a Notification of Compliance Status including the information in 40 CFR 63.9(h)(2)(i) before the close of business on the 30th day following the completion of an initial compliance demonstration that does not include a performance test and on the 60th day following the completion of an initial compliance demonstration that includes a performance test. The

permittee shall submit subsequent Notification of Compliance Status reports before the close of business on the 60th day following the completion of any subsequent required performance tests. (Ref.: 40 CFR 63.6645(a) and (h), 63.9(h), and 63.10(d)(2))

- 5.C.7 For Emission Points AA-051 through AA-064, beginning May 3, 2014, the permittee shall submit compliance reports that include the information in 40 CFR 63.6650(c), (d), and (e), as applicable, in accordance with Condition 5.A.4. The report shall also include each instance when the applicable requirements of Table 8 of Subpart ZZZZ were not met. (Ref.: 40 CFR 63.6640(b) and (e) and 63.6650)

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. The full text of the referenced regulations is contained in Appendix B to this permit.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to § 82.106.
 - (b) The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - (d) No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to § 82.166. ("MVAC - like appliance" is defined at § 82.152.)
 - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

- (f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

- 7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NM VOC	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 Φm 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

40 CFR 82

PROTECTION OF STRATOSPHERIC OZONE

APPENDIX C

40 CFR 60, SUBPART IIII

**NEW SOURCE PERFORMANCE STANDARD FOR COMPRESSION
IGNITION INTERNAL COMBUSTION ENGINES**

APPENDIX D

40 CFR 63, SUBPART ZZZZ

**NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
FOR RECIPROCATING INTERNAL COMBUSTION ENGINES**

APPENDIX E

**ALTERNATIVE OPERATING LIMITATION APPROVAL
For 40 CFR 63, SUBPART ZZZZ**