

**STATE OF MISSISSIPPI  
AND FEDERALLY ENFORCEABLE  
AIR POLLUTION CONTROL  
PERMIT**

**TO OPERATE AIR EMISSIONS EQUIPMENT AT A  
SYNTHETIC MINOR SOURCE**

**THIS CERTIFIES THAT**

Ethos Alternative Energy Mississippi LLC  
101 65th Avenue  
Meridian, Mississippi  
Lauderdale County

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

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

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**AUTHORIZED SIGNATURE  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Issued: XXXXX**

**Permit No.: 1460-00127**

**Effective Date: As specified herein.**

**Expires: [No more than 5 years from the issue date.]**

## SECTION 1. GENERAL CONDITIONS

### A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)
3. Any activities not identified in the application are not authorized by this permit.  
(Ref.: Miss. Code Ann. 49-17-29 1.b)
4. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials:
  - a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and
  - b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission.(Ref.: Miss. Code Ann. 49-17-21)

9. Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control.  
(Ref.: Miss. Code Ann. 49-17-39)
10. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
11. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)
12. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
  - a. Routine maintenance, repair, and replacement;
  - b. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
  - c. Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
  - d. Use of an alternative fuel or raw material by a stationary source which:
    - (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 40CFR 51.66;
  - 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).)

**B. GENERAL OPERATIONAL CONDITIONS**

1. Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation, 11 Miss. Admin. Code Pt. 2, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.10.)
2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
3. Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.  
(Ref.: Miss. Code Ann. 49-17-29 1.a(i and ii))
4. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - a. Upsets
    - (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
      - (i) An upset occurred and that the source can identify the cause(s) of the upset;
      - (ii) The source was at the time being properly operated;
      - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
      - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset,

the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;

- (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
  - (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
  - (3) This provision is in addition to any upset provision contained in any applicable requirement.
  - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- b. Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
  - (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

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

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

(4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

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

**C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION**

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

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

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

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

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

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

9. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:

- a. Persistent violation of any terms or conditions of this permit.
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

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

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

## SECTION 2. EMISSION POINT DESCRIPTIONS

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

| Emission Point | Facility Reference | Description   |
|----------------|--------------------|---|
| <b>AA-000</b>  | ---                | <b>Entire Biodiesel Production Facility</b>   |
| AA-001         | ---                | Facility-Wide Equipment Leak Fugitive Emissions   |
| AA-002         | ---                | One (1) 177 HP Diesel-Fired Fire Water Pump with a displacement of less than 30 liters per cylinder |
| <b>AB-000</b>  | ---                | <b>Facility-Wide Storage Tanks</b>  |
| AB-001         | MGC-S-T8           | One (1) 20,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-002         | MGC-S-T10          | One (1) 20,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-003         | MGC-S-T36          | One (1) 20,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-004         | MGC-S-T37          | One (1) 30,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-005         | MGC-S-T38          | One (1) 30,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-006         | MGC-S-T39          | One (1) 30,000 Gallon Biodiesel Feedstock Material Storage Tank                                     |
| AB-007         | MGC-S-T40          | One (1) 20,000 Gallon Glycerin Storage Tank   |
| AB-008         | MGC-S-T41          | One (1) 30,000 Gallon Glycerin Storage Tank   |
| AB-009         | MGC-S-T42          | One (1) 20,000 Gallon Methanol Storage Tank   |
| AB-010         | MGC-S-T43          | One (1) 34,000 Gallon Methanol Storage Tank   |
| AB-011         | MGC-S-T44          | One (1) 13,000 Gallon Catalyst (Potassium Hydroxide/Methanol Blend) Storage Tank                    |
| AB-012         | MGC-S-T45          | One (1) 3,500 Gallon Catalyst (Potassium Hydroxide/Methanol Blend) Storage Tank                     |
| AB-013         | MGC-S-T46          | One (1) 8,000 Gallon Biodiesel Blending Storage Tank  |
| AB-014         | MGC-S-T47          | One (1) 8,000 Gallon Biodiesel Blending Storage Tank  |
| AB-015         | MGC-S-T48          | One (1) 20,000 Gallon Biodiesel Storage Tank  |
| AB-016         | MGC-S-T49          | One (1) 20,000 Gallon Biodiesel Storage Tank  |
| AB-017         | MGC-S-T50          | One (1) 34,000 Gallon Biodiesel Storage Tank for Resin Wash   |
| AB-018         | MGC-S-T51          | One (1) 30,000 Gallon Biodiesel Storage Tank  |
| AB-019         | MGC-S-T52          | One (1) 30,000 Gallon Biodiesel Storage Tank  |



| Emission Point | Facility Reference | Description                                  |
|----------------|--------------------|--|
| AB-020         | MGC-S-T53          | One (1) 30,000 Gallon Biodiesel Storage Tank |
| AB-022         | ---                | Methanol Recovery System                     |

**SECTION 3. EMISSION LIMITATIONS AND STANDARDS**

| Emission Point | Applicable Requirement  | Condition Number(s) | Pollutant/Parameter  | Limitation/Standard  |
|----------------|---|---------------------|--|--|
| AA-000         | 11 Miss. Admin. Code Pt. 2, R. 1.3.A.   | 3.1                 | Opacity  | Facility-wide opacity limitations  |
|                | 11 Miss. Admin. Code Pt. 2, R. 1.3.B.   | 3.2                 |  |  |
|                | 11 Miss. Admin. Code Pt. 2, R. 1.3.C  | 3.3                 | PM/PM <sub>10</sub><br>(filterable only)                         | General nuisance limitation  |
|                | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).   | 3.4                 | VOC  | 95.0 tpy   |
| 3.5            |   | HAPs                | 9.0 tpy for any individual HAP<br>24.0 tpy for all combined HAPs |  |
| AA-001         | 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (60.480a(a) and (b)) | 3.6                 | VOC/HAP  | Applicability  |
|                | 40 CFR Part 60, Subpart VVa (60.482-1a(c))<br>11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).   | 3.7                 |  | Implement and maintain a site specific LDAR plan   |
|                | 40 CFR Part 60, Subpart VVa (60.482-1a(e))  | 3.8                 |  | Equipment exemption requirements   |
| AA-002         | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).   | 3.9                 | PM/PM <sub>10</sub><br>(filterable only)                         | 0.6 lb/MMBTU per hour heat input   |
|                | 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (63.6585(a) and (c))  | 3.10                | VOC  | Applicability  |
|                | 40 CFR Part 63, Subpart ZZZZ (63.6590(a)(2)(iii) and 63.6590(c)(1))   | 3.11                |  | Demonstration of compliance with Part 63, Subpart ZZZZ by compliance with the specified requirements of Part 60, Subpart III |
|                | 40 CFR Part 60, Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (60.4205(c) and Table 4 to Subpart III)  | 3.12                | NMHC+NO <sub>x</sub><br>CO<br>PM                                 | <ul style="list-style-type: none"> <li>• 3.0 g/HP-hr</li> <li>• 2.6 g/HP-hr</li> <li>• 0.15 g/HP-hr</li> </ul>               |

| Emission Point | Applicable Requirement   | Condition Number(s) | Pollutant/Parameter | Limitation/Standard   |
|----------------|--|---------------------|---------------------|---|
| AA-002         | 40 CFR Part 60, Subpart III (§60.4207(b) and 80.510(b)(1-2))                           | 3.13                | Fuel Requirements   | Sulfur content of 15 ppm max., <b>AND</b><br>Minimum cetane index of 40, <b>OR</b><br>Maximum aromatic content of 35 volume percent |
|                | 40 CFR Part 60, Subpart III (§60.4209(a))<br>11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.14                | Exhaust Emissions   | Install a non-resettable hour meter prior to initial start-up   |
|                | 40 CFR 60, Subpart III (§40 CFR 60.4211(a)(1-3), (c), and (f)(1-3))                    | 3.15                |                     | Emergency engine definition   |

3.1 For the entire facility (Emission Point AA-000), 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. 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.

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

3.2 For the entire facility (Emission Point AA-000), except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For the entire facility (AA-000), the permittee shall not cause, permit, or allow the emission of particulates or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

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

3.4 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of Volatile Organic Compounds (VOC) to no more than 95.0 tons per year (tpy) for each consecutive 12-month period on a rolling basis.

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

3.5 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of any individual hazardous air pollutant (HAP) from both sources to no more than 9.0 tpy for each consecutive 12-month period on a rolling basis. The permittee shall limit the

emissions of all combined HAPs from both sources to no more than 24.0 tpy for each consecutive 12-month period on a rolling basis.

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

- 3.6 Emission Point AA-001 encompasses all facility-wide equipment leak fugitive emissions which originated from a synthetic organic chemicals manufacturing industry (SOCMI). As such, this emission point is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. The permittee shall be in compliance with the applicable requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a at all times.

(Ref.: 40 CFR 60.480a(a) and (b))

- 3.7 For Emission Point AA-001, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a by maintaining a site specific leak detection and repair (LDAR) plan which provides an equivalent level of emission control to the standards outlined in Subpart VVa. The level of equivalence shall be determined using the guidelines outlined in 40 CFR 60.484a. The plan shall address potential leaks generated by all equipment in VOC service, including but not limited to: pumps, compressors, pressure relief devices, sampling connections, open-ended valves, or any other connectors. Once during the life of the permit, the permittee must reevaluate the plan to verify that it is still meeting the requirements of Subpart VVa. The LDAR plan shall be kept on-site at all times and shall be made readily available for review upon request.

Furthermore, in the event that equipment in VOC service is added or removed from the process, the permittee shall submit a revised LDAR to the MDEQ no later than sixty (60) days following the modification. The MDEQ may request that the LDAR be revised if it is determined that the proposed plan will not sufficiently control the potential emissions generated by the affected sources to such a degree as to be considered equivalent to the standards outlined in Subpart VVa. In the event that such a revision is requested, the permittee shall submit the required revised LDAR within ninety (90) days from receiving notification of the requested modification.

(Ref.: 40 CFR 482-1a(c) and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.8 For Emission Point AA-001, any equipment which the permittee has properly identified according to 40 CFR 486a(e)(6) as being in VOC service for less than 300 hours per year may be excluded from meeting the requirements of 40 CFR 60.482-2a through 60.482-11a if it satisfies one of the conditions outlined in paragraphs (a) through (c) below:

- (a) The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process.
- (b) The equipment is in VOC service only during process malfunctions or other emergencies.

(c) The equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(Ref.: 40 CFR 482-1a(e))

3.9 For Emission Point AA-002, the permittee shall limit the particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input to no more than 0.6 pounds per MMBTU per hour heat input.

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

3.10 Emission Point AA-002 is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAPs. As such, this engine is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

(Ref.: 40 CFR 63.6585(a) and (c))

3.11 Emission Point AA-002 is a stationary RICE located at an area source of HAP emissions which was constructed after June 12, 2006. As such, this engine is considered to be a new stationary RICE and shall demonstrate compliance with the requirements of Subpart ZZZZ by complying with the applicable requirements of Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

(Ref.: 40 CFR 63.6590(a)(2)(iii) and 63.6590(c)(1))

3.12 For Emission Point AA-002, the permittee shall limit the emissions of non-methane hydrocarbons and nitrogen oxides (NMHC+NO<sub>x</sub>) to no more than 3.0 grams per horsepower-hour (g/HP-hr), the emissions of carbon monoxide (CO) to no more than 2.6 g/HP-hr, and the emissions of particulate matter (PM) to no more than 0.15 g/HP-hr. The permittee must achieve these standards for the life of the engine.

(Ref.: 40 CFR 60.4205(c), 40 CFR 60.4206, and Table 4 to Subpart IIII)

3.13 For Emission Point AA-002, the permittee shall use diesel fuel that meets the following requirements:

(a) Sulfur content

(1) 15 ppm maximum for non-road diesel fuel

(b) Cetane index or aromatic content

(1) A minimum cetane index of 40; or

(2) A maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 60.4207(b) and 40 CFR 80.510(c)(1-2))

3.14 For Emission Point AA-002, the permittee shall install a non-resettable hour meter prior to the startup of the affected engine.

(Ref.: 40 CFR 60.4209(a) and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.15 For Emission Point AA-002, the permittee shall install, operate, and maintain the engine according to the manufacturer's emission related written instructions, may change only

those emissions related settings that are permitted by the manufacturer, and the engine must be certified to meet the emissions limitations contained in Condition 3.11.

The permittee shall operate the emergency engine in accordance with (a) through (c) below so that the engine may continue to be considered an “emergency engine”. Any operation other than emergency operation, maintenance and testing, emergency demand response, and 50 hours of operation in non-emergency situations as described in (a) through (c) below is prohibited.

- (a) There is no time limit on the use of the engine in emergency situations.
- (b) The engine may each be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or 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 such a petition is not required if the permittee keeps records indicating that federal, state, or local standards require maintenance and testing of the engine for more than 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 contained in (b). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electrical grid or otherwise supply power as part of a financial agreement with another entity. If the source does have a financial agreement with another entity, the 50 hours of non-emergency operation may be used as long as ALL the conditions in 40 CFR 60.4211(f)(3)(i)(A-E) are met.

If the affected engine does not operate in accordance with the requirements in (a) through (c) above, then the engine will not be considered an emergency engine and must meet all applicable requirements for non-emergency engines.

(Ref.: 40 CFR 60.4211(a)(1-3), (c), and (f)(1-3))

## SECTION 4. WORK PRACTICES

| Emission Point | Applicable Requirement                    | Condition Number(s) | Pollutant/Parameter     | Work Practice                                    |
|----------------|---|---------------------|-------------------------|--|
| AA-000         | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 4.1                 | Facility-Wide Emissions | Operate all equipment as efficiently as possible |

- 4.1 For the entire facility (AA-000), the permittee shall operate and maintain the sources, in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

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

## SECTION 5. MONITORING & RECORDKEEPING REQUIREMENTS

| Emission Point | Applicable Requirement                      | Condition Number(s) | Pollutant/Parameter | Monitoring/Recordkeeping Requirement       |
|----------------|---|---------------------|---------------------|--|
| AA-000         | 11 Miss. Admin. Code Pt. 2, R. 2.9.         | 5.1                 | Recordkeeping       | Maintain records for a minimum of 5 years. |
|                | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).   | 5.2                 | VOC/HAP             | Monitoring and recordkeeping requirements  |
|                |   | 5.3                 | Biodiesel           | Production monitoring and recordkeeping    |
| AA-001         | 40 CFR Part 60, Subpart VVa (60.486a)       | 5.4                 | VOC                 | Recordkeeping requirements                 |
|                | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).   |                     |                     |  |
|                | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).   | 5.5                 |                     |  |
| AA-002         | 40 CFR 60, Subpart III (§40 CFR 60.4214(b)) | 5.6                 | Exhaust Emissions   | Recordkeeping requirements                 |
| AB-000         | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).   | 5.7                 | Methanol            | Throughput monitoring and recordkeeping    |

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

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

5.2 For the entire facility, in order to demonstrate compliance with Conditions 3.4 and 3.5, the permittee shall calculate and record the emissions of VOCs and HAPs for each calendar month and for each 12-month period on a rolling basis.

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

5.3 For the entire facility, the permittee shall monitor and record the amount of biodiesel produced in each calendar month and for each 12-month period on a rolling basis.

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

5.4 For Emission Point AA-001, the permittee shall comply with the applicable recordkeeping requirements specified in 40 CFR 60.486a. Specifically, the permittee shall maintain the records outlined in (a) through (e) below in accordance with the site specific LDAR plan.



- (a) An up-to-date list of all equipment subject to Subpart VVa including, but not limited to, all pumps, compressors, pressure relief devices, sampling connections, open-ended valves, or any other connectors.
- (b) A piping diagram or schematic for reference of location.
- (c) Records of when any leak detection inspections are performed.
- (d) Results of any performance testing and leak detection inspections.
- (e) When a leak is detected, the permittee shall record the specific piece of equipment which is leaking as well as the date and time of the discovery. Furthermore, the permittee shall record what actions were taken to repair the leaking equipment. In the event that no action is taken, the permittee shall include a description of the circumstances explaining why no action was taken to repair the leak.

(Ref.: 40 CFR 60.486a and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.5 For Emission Point AA-001, the permittee must keep records that the reevaluation of the LDAR plan required by Condition 3.8 has been performed.

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

- 5.6 For Emission Point AA-002, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that is recorded through the non-resettable hour meter. The permittee shall record the time and reason that the engine is being operated.

(Ref.: 40 CFR 60.4214(b))

- 5.7 For Emission Point AB-000, for any storage tank with the potential to emit methanol, the permittee shall monitor and record the methanol throughput for each tank. The emissions of methanol shall be calculated using the recorded throughput data and the most recent version of EPA's TANKS software.

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

## SECTION 6. REPORTING REQUIREMENTS

| Emission Point | Applicable Requirement   | Condition Number(s) | Reporting Requirement   |
|----------------|--|---------------------|---|
| AA-000         | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).  | 6.1                 | Report permit deviations within five (5) working days.  |
|                |  | 6.2                 | Submit certified annual monitoring report.  |
|                |  | 6.3                 | All documents submitted to MDEQ shall be certified by a Responsible Official or Duly Authorized Representative. |
| AA-001         | 40 CFR Part 60, Subpart VVa (60.486a)<br>11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.4                 | Reporting requirements  |
|                | 40 CFR Part 60, Subpart VVa (60.487a)<br>11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.5                 |   |

- 6.1 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. The report shall be submitted within five (5) working days of the time the deviation began.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 6.2 Except as otherwise specified herein, the permittee shall submit a certified annual synthetic minor monitoring report postmarked no later than 31st of January for the preceding calendar year. This report shall address any required monitoring specified in the permit. Specifically, this report shall include the 12-month rolling totals of VOCs and HAPs, in tons per year, for the previous calendar year. All instances of deviations from permit requirements must be clearly identified in the report. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 6.3 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official or duly authorized representative stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 6.4 For Emission Point AA-001, the permittee shall include in the annual report required by Condition 6.2, a statement that the facility has reevaluated their LDAR plan and include if any what changes were made as a result of this evaluation. If no changes are being made then the report shall include a negative declaration. This information shall be submitted with the annual report only once in the lifetime of the permit.

(Ref.: 40 CFR 60.486a and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.5 For Emission Point AA-001, the permittee shall comply with the applicable reporting requirements specified in 40 CFR 60.487a. Specifically, the permittee shall submit semiannual reports which contain the information outlined in (a) and (b) below in accordance with the site specific LDAR plan.

- (a) An up-to-date list of all equipment subject to Subpart VVa including, but not limited to, all pumps, compressors, pressure relief devices, sampling connections, open-ended valves, or any other connectors.
- (b) For each month during the semiannual reporting period, the permittee shall identify all equipment for which leaks were detected as well as identification of all equipment for which the detected leaks were not repaired. The permittee shall include descriptions of the actions taken in order to repair any detected leaks. The permittee shall also include an explanation, where appropriate, of why the repair of any detected leaks was technically infeasible.

(Ref.: 40 CFR 60.487a and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)