STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Ergon Biofuels LLC
1833 Haining Road
Vicksburg, Mississippi
Warren County

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

Permit Issued:

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

_____

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: **Permit No.: 2780-00107**

9039 PER20180001

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

1.4 (a) This permit shall be reopened and revised under any of the following circumstances:

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.

(2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

(4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to

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

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

1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)

(a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(b) If the Commission determines that there is not sufficient information available on a

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

(c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

(a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

(b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)

1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

1.15 Nothing in this permit shall alter or affect the following:

(a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;

(b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.

(d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

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

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional

information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

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

(a) the changes are not modifications under any provision of Title I of the Act;

(b) the changes do not exceed the emissions allowable under this permit;

(c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:

(1) a brief description of the change(s),

(2) the date on which the change will occur,

(3) any change in emissions, and

(4) any permit term or condition that is no longer applicable as a result of the change;

(d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of

operation shall not include:

(a) routine maintenance, repair, and replacement;

(b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;

(d) use of an alternative fuel or raw material by a stationary source which:

(1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or

(2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

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

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

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

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

the following buffer zones.

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

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

(c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.

(a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

(c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

(1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;

(2) the permitted facility was at the time being properly operated;

(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the

emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

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

(a) Upsets

(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.

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	**Receiving**
AA-001	Truck and Rail Receiving with air emissions controlled by a common baghouse
AA-002	Barge Receiving with air emissions controlled by a baghouse
AB-000	**Handling**
AB-001	Headhouse conveying with air emissions controlled by a baghouse
AB-002	Barge Receiving Scale with air emissions controlled by a baghouse
AB-003	Grain Scale with air emissions controlled by a baghouse
AB-004	Barge Unloading Conveyor with air emissions controlled by a baghouse
AB-005	Grain-to-Ethanol Covered Conveyor
AC-000	**Hammermills**
AC-001	No. 1 Hammermill with air emissions controlled by a baghouse
AC-002	No. 2 Hammermill with air emissions controlled by a baghouse
AD-000	**Fermenting & Distillation**
AD-001	Yeast System, Slurry Mix Tank, Liquefaction Tank, Thin Stillage Collection Tank, Thin Stillage Tank, Whole Stillage Tank, Process condensate Tank, Syrup Tank, Evaporator Vacuum Receiver, Beer Column vent Condenser, Reflux Vent Condenser, and Regen receiver with air emissions being controlled by a vent gas scrubber
AD-002	4 fermenters, 1 beer column, 1 rectifier column, 1 stripper column, centrifuges, and evaporators with air emissions being controlled by a carbon dioxide scrubber
AE-000	**Ethanol Loadout**
AE-001	Ethanol Truck Loadout
AE-002	Ethanol Rail Loadout
AE-003	Ethanol Barge Loadout
AG-000	**Storage**

Emission Point	Description
AG-001	Day Storage Bin No. 1
AG-002	Day Storage Bin No. 2 (Formerly AG-001)
AG-003	Day Storage Bin No. 3 (Formerly AG-001)
AG-004	Day Storage Bin No. 4 (Formerly AG-001)
AG-005	Day Storage Bin No. 5 (Formerly AG-001)
AG-006	Grain Storage Bin No. 6 (Formerly AG-001)
AG-007	Grain Storage Bin No. 7 (Formerly AG-001)
AG-008	Grain Storage Bin No. 8 (Formerly AG-001)
AG-009	Grain Storage Bin No. 9 (Formerly AG-001)
AG-010	Ground Pile (Formerly AG-001)
AG-014	B-House (Distiller Dried Grain with Solubles (DDGS) storage) (Formerly AG-002)
AG-015	C-House (Corn Storage) (Formerly AG-001)
AG-016	D-House (Corn Storage) (Formerly AG-001)
AH-000	**Distiller Dried Grain with Solubles (DDGS) Processing and Loadout**
AH-001	DDGS Truck Loadout and DDGS rail Loadout with air emissions controlled by a common baghouse
AH-002	DDGS Barge Loadout
AH-003	Thermal Oxidizer (Heat Capacity 18 MMBTU/hr) controlling emissions from the natural gas fired DDGS dryer (96.4 MMBTU/hr; Ref. SV-007)
AH-004	Fluidized Bed Cooler with emissions controlled by a baghouse
AI-000	**Miscellaneous Fuel Burning Sources**
AI-001	No. 1 Natural Gas Fired Boiler (Heat Capacity 92.4 MMBTU/hr; Ref. SV-011A)
AI-002	No. 2 Natural Gas Fired Boiler (Heat Capacity 92.4 MMBTU/hr; Ref. SV-011B)
AI-004	Guard Shack and Main Gate 18 HP Emergency Generator (0.22 MMBTU/hr) fueled by LPG
AI-005	Control Room Building 36 HP Emergency Generator (0.30 MMBTU/hr) fueled by LPG
AI-006	742 HP Fire Pump Engine (2011 Model; Heat Input Capacity 4.8 MMBTU/hr) fueled by diesel

Emission Point	Description
AJ-000	**Fugitive/Other Sources**
AJ-001	Equipment Leaks of VOC subject to NSPS Subpart VVa
AJ-002	On Site Plant Roads
AK-000	**Storage Tanks**
AK-001	Ethanol Storage Tank (420,000 gallon capacity; Ref. T-6101)
AK-002	Ethanol Storage Tank (420,000 gallon capacity; Ref. T-6102)
AK-003	Denaturant Storage Tank (420,000 gallon capacity; Ref. T-6103)
AK-004	Denatured Ethanol Storage Tank (2,520,000 gallon capacity; Ref. T-6105)
AK-005	Denatured Ethanol Storage Tank (2,520,000 gallon capacity; Ref. T-6106)
AK-008	Corn Oil Storage Tank (26,852 gallon capacity; Ref. T-6109)
AK-009	Corn Oil Storage Tank (26,852 gallon capacity; Ref. T-6110)
AL-001	Corn Oil Loadout

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 Condition 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
Facility Wide	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable only)	$E=4.1p^{0.67}$
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.2	Ethanol Production	715,000 tpy
				69,300,000 gallons per year
			DDGS Production	225,000 tpy
			Grain Throughput	1,100,000 tpy
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.3	HAP	24.0 tpy total combined HAPs and 9.0 tpy for each individual HAP
AD-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.4	VOC	1.23 lb/hr
AD-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.5	VOC	11.0 lb/hr
AH-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.6	VOC	4.7 lb/hr
			PM/ PM_{10} (filterable + condensable)	14.09 lb/hr
			CO	38.47 lb/hr
			NOx	6.96 lb/hr
AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002	NSPS for Grain Elevators, 40 CFR Part 60, Subpart DD 40 CFR 60.300(a) and (b), Subpart DD and 40 CFR 60.301, Subpart DD	3.B.7	PM	Applicability
	40 CFR 60.302(b), Subpart DD	3.B.8	PM (filterable only)	0.01gr/dscf
			Opacity	0%
AA-002	40 CFR 60.302(d), Subpart DD	3.B.9	PM (filterable only)	Operational Requirement
AI-001 and AI-002	NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc 40 CFR 60.40c(a), Subpart Dc and 40 CFR 60.41c, Subpart Dc	3.B.10	SO2	Applicability
	Air Construction Permit issued May 30, 2008	3.B.11	Fuel Restriction	Fuel restricted to natural gas

AI-004, AI-005, and AI-006	NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ 40 CFR 63.6580, Subpart ZZZZ; 40 CFR.6585(a) and (c), Subpart ZZZZ; and 40 CFR 63.6590(c)(1), Subpart ZZZZ	3.B.12	HAP	Applicability
AI-004 and AI-005	NSPS for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ 40 CFR Part 60.4230(a)(4)(iii) and (iv), Subpart JJJJ	3.B.13	NMHC + NOx, CO, and PM	Applicability
AI-004	40 CFR 60.4233(a), Subpart JJJJ; 40 CFR 60.4231(a), Subpart JJJJ; 40 CFR 60.4234, Subpart JJJJ; and 40 CFR 90	3.B.14	HC + NOx and CO	Operational Requirement
AI-005	40 CFR 60.4233(c), Subpart JJJJ; 40 CFR 60.4231(c), Subpart JJJJ; 40 CFR 60.4234, Subpart JJJJ; and 40 CFR 1048	3.B.15		Operational Requirement
AI-006	NSPS for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII 40 CFR Part 60.4200(a)(2)(ii), Subpart IIII	3.B.16	NMHC + NOx and PM	Applicability
	40 CFR 60.4205(c), Subpart IIII; 40 CFR 60.4206, Subpart IIII; and Table 4 of Subpart IIII	3.B.17		3.0 grams/HP-hr NMHC + NOx and 0.15 grams/HP-hr PM
	40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b)	3.B.18	Fuel Restriction	Operational Requirement
AI-004, AI-005, and AI-006	40 CFR 60.4211(f), Subpart IIII and 40 CFR 60.4243(d), Subpart JJJJ	3.B.19	Emergency Operations	Operational Requirement
AJ-001	NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, 40 CFR Part 60, Subpart VVa 40 CFR 60.480a(a) and (b), Subpart VVa and 40 CFR 60.481a, Subpart VVa	3.B.20	VOC	Applicability
	40 CFR 60.482-1a, Subpart VVa	3.B.21	VOC	Comply with applicable emission standards of 40 CFR 60.482-1a to 60.482-11a

AK-001 through AK-005	NSPS of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR Part 60, Subpart Kb 40 CFR 60.110b(a), Subpart Kb and 40 CFR 60.111b, Subpart Kb	3.B.22	VOC	Applicability
	40 CFR 60.112b(a)(1), Subpart Kb	3.B.23		Tank design specifications
AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, AC-002, AD-001, AD-002, AH-001, AH-003, and AH-004	Permit to Construct issued on May 30, 2008	3.B.24	Operating Restriction	Operational Requirement
AH-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.25	Operating Restriction	Operational Requirement
AC-001, AC-002, AD-002, and AH-003	40 CFR 64.2	3.B.26	Applicability	Compliance Assurance Monitoring (CAM) Applicability

3.B.1 Except as otherwise specified, no person shall cause, permit or allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship:

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

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

Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

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

3.B.2 For the entire facility, the permittee shall limit throughput and production as follows:

(a) Ethanol Production – 715,000 tons per year (12-month rolling total); 69,300,000 gallons per year (12-month rolling total)

(b) DDGS Production – 225,000 tons per year (12-month rolling total)

(c) Total Grain Throughput – 1,100,000 tons per year (12-month rolling total)

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

3.B.3 For the entire facility, the permittee shall limit emissions of total combined Hazardous Air Pollutants (HAP) to 24.0 tpy on a rolling, consecutive 12-month basis and emissions of each individual HAP to 9.0 tpy on a rolling, consecutive 12-month basis.

3.B.4 For Emission Point AD-001, the permittee shall limit VOC emissions to 1.23 lb/hr based on a rolling, consecutive 3-hr average.

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

3.B.5 For Emission Point AD-002, the permittee shall limit VOC emissions to 11.0 lb/hr based on a rolling, consecutive 3-hr average.

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

3.B.6 For Emission Point AH-003, the permittee shall limit VOC emissions to 4.7 lb/hr based on a rolling, consecutive 3-hr average; PM/PM_{10} (filterable + condensable) emissions to 14.09 lb/hr based on a rolling, consecutive 3-hr average; CO emissions to 38.47 lb/hr based on a rolling, consecutive 3-hr average; and NOx emissions to 6.96 lb/hr based on a rolling, consecutive 3-hr average.

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

3.B.7 For Emission Points AA-001, AA-002, AB-001, AB-002, AB-003, and AB-004, the permittee is subject to and shall comply with all applicable standards of 40 CFR Part 60, Subpart DD (NSPS for Grain Elevators) and Subpart A (General Provisions).

(Ref.: 40 CFR 60.300, Subpart DD)

3.B.8 For Emission Points AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002, the permittee shall not discharge into the atmosphere from any affected facility except a grain dryer any process emission which contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf) or exhibits greater than 0 percent opacity.

(Ref.: 40 CFR 60.302(b), Subpart DD)

3.B.9 For Emission Point AA-002, the permittee shall operate the barge unloading station as follows:

1. The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

2. The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft^3 /bu).

3. Rather than meet the requirements of Conditions 3.B.9.1 or 3.B.9.2., the permittee may use other methods of emission control if it is demonstrated to the MDEQ's satisfaction that they would reduce emissions of particulate matter to the same level or less.

(Ref.: 40 CFR 60.302(d), Subpart DD)

3.B.10 For Emission Points AI-001 and AI-002, the permittee is subject to and shall comply with all applicable standards of 40 CFR Part 60, Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units) and Subpart A (General Provisions).

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

3.B.11 For Emission Points AI-001 and AI-002, the permittee shall only combust natural gas.

(Ref.: Air Construction Permit issued May 30, 2008)

3.B.12 For Emission Points AI-004, AI-005, and AI-006, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ.

Emission Points AI-004 and AI-005 are considered new spark ignition (SI) emergency engines, each with a site rating less than 500 HP that are located at an Area Source of HAP emissions and, as such, meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. No other requirements of 40 CFR Part 63, Subpart ZZZZ or the General Provisions in Subpart A apply to the emergency engines.

Emission Point AI-006 is considered a new compression ignition (CI) emergency fire pump engine with a site rating greater than 500 HP that is located at an Area Source of HAP emissions and, as such, meets the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII. No other requirements of 40

CFR Part 63, Subpart ZZZZ or the General Provisions in Subpart A apply to the emergency engine.

(Ref.: 40 CFR 63.6580, 40 CFR 63.6585(a) and (c), and 40 CFR 63.6590(c)(1), Subpart ZZZZ)

3.B.13 For Emission Points AI-004 and AA-005, the permittee is subject to the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines in 40 CFR 60, Subpart JJJJ and the General Provisions in Subpart A.

(Ref.: 40 CFR Part 60.4230(a)(4)(iii) and (iv), Subpart JJJJ)

3.B.14 For Emission Point AI-004, Nitrogen Oxides plus Hydrocarbons (HC + NOx) emissions are limited to 16.1grams per kilowatt-hour (g/kW-hr) and Carbon Monoxide (CO) emissions are limited to 519 g/kW-hr. The permittee must operate and maintain the engine to achieve these emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4231(a) and 40 CFR 60.4233(a), Subpart JJJJ, and 40 CFR 90)

3.B.15 For Emission Point AI-005, Nitrogen Oxides plus Hydrocarbons (HC + NOx) emissions are limited to 2.7 grams per kilowatt-hour (g/kW-hr) and Carbon Monoxide (CO) emissions are limited to 4.4 g/kW-hr. The permittee must operate and maintain the engine to achieve these emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4231(c) and 40 CFR 60.4233(c), Subpart JJJJ, and 40 CFR 1048)

3.B.16 For Emission Point AI-006, the permittee is subject to the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines in 40 CFR 60, Subpart IIII and the General Provisions in Subpart A.

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

3.B.17 For Emission Point AI-006, Nitrogen Oxides plus Total Non-Methane Hydrocarbons (NMHC + NOx) emissions are limited to 3.0 grams per horsepower-hour (g/hp-hr) and Particulate Matter (PM) emissions are limited to 0.15 g/hp-hr. The permittee must operate and maintain the engine to achieve these emission standards over the entire life of the engine.

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

3.B.18 For Emission Point AI-006, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel. The fuel shall have a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 35 percent volume.

(Ref.: 40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b))

3.B.19 For Emission Points AI-004, AI-005, and AI-006, the permittee shall operate the emergency engines according to the requirements below:

(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 DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. 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 Subpart JJJJ for Emission Points AI-004 and AI-005 or Subpart IIII for Emission Point AI-006 and must meet any applicable requirements for a non-emergency engine.

(Ref.: 40 CFR 60.4211(f), Subpart IIII and 40 CFR 60.4243(d), Subpart JJJJ)

3.B.20 For Emission Point AJ-001, the permittee is subject to and shall comply with all applicable standards of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, 40 CFR Part 60, Subpart VVa and Subpart A (General Provisions).

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

3.B.21 For Emission Point AJ-001, the permittee is subject to the applicable requirements of 40 CFR 60.482-1a through 60.482-11a. Compliance with 40 CFR 60.482-1a to 60.482-11a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. Equipment

that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a through 60.482-11a if it is identified as required in 40 CFR 60.486a(e)(5). Equipment that the permittee designates as being in VOC service less than 300 hr/yr is excluded from the requirements of 40 CFR 60.482-2a through 60.482-11a if it is identified as required in 40 CFR 60.486a(e)(6) and it meets any of the conditions specified in paragraphs 40 CFR 60.482-1a (e)(1) through (3).

(Ref.: 40 CFR 60.482-1a, Subpart VVa)

3.B.22 For Emission Points AK-001 through AK-005, the permittee is subject to and shall comply with all applicable standards of Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR Part 60, Subpart Kb and Subpart A (General Provisions).

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

3.B.23 For Emission Points AK-001 through AK-005, the permittee shall equip the storage vessels with a fixed roof in combination with an internal floating roof meeting the design specifications of 40 CFR 60.112b(a)(1)(i)-(ix).

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

3.B.24 For Emission Points AA-001, AA-002, AB-001 through AB-004, AC-001, AC-002, AD-001, AD-002, AH-001, AH-003, and AH-004, each control device shall be in operation and functioning efficiently when operating any emissions equipment that vents to a control device. Should any control device become inoperable the respective emissions equipment shall be shut down until the proper repairs can be completed. Operation of equipment without controls is prohibited.

(Ref.: Air Construction Permit issued May 30, 2008)

3.B.25 For Emission Point AH-003, the permittee may operate the source for a maximum of 250 hours per year with uncontrolled emissions, as an exception to Condition 3.B.24.

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

3.B.26 For Emission Points AC-001, AC-002, AD-002, and AH-003, the permittee shall comply with the Compliance Assurance Monitoring (CAM) requirements as specified in 40 CFR Part 64. A CAM Plan has been prepared to ensure proper operation of the control devices on each source to ensure compliance with emissions limitations. The CAM Plan is provided in Appendix C.

(Ref.: 40 CFR 64.2)

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.C.1	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)	3.C.2	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).)

D. Work Practice Standards

None.

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).)

4.3 The permittee shall submit progress reports consistent with an applicable schedule of compliance and 11 Miss. Admin. Code Pt. 2, R. 6.2.C(8) semiannually, or at such other frequency as is specified in an applicable requirement or by the Permit Board. Such progress reports shall contain the following:

(a) dates for achieving the activities, milestone(s), or compliance required in the schedule of compliance, and dates when such activities, milestone(s) or compliance were achieved; and

(b) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:

(a) the date, place as defined in the permit, and time of sampling or measurements;

(b) the date(s) analyses were performed;

(c) the company or entity that performed the analyses;

(d) the analytical techniques or methods used;

(e) the results of such analyses; and

(f) the operating conditions existing at the time of sampling or measurement.

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

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

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.1	Production & HAPs	Monitoring and recordkeeping requirements
		5.B.2	Preventative Maintenance	Monitoring and recordkeeping requirements
AI-001 and AI-002	40 CFR 60.48c(g)(2), Subpart Dc	5.B.3	Fuel Burning	Monitoring and recordkeeping requirements
AA-000, AB-000, and AH-000	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.4	Opacity	Monitoring and recordkeeping requirements
AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.5	PM	Performance stack testing
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.6	Pressure Drop	Monitoring and recordkeeping requirements
AK-001 through AK-005	40 CFR 60.113b(a)(2)-(4) and 40 CFR 60.115b(a)(2), Subpart Kb	5.B.7	VOC	Monitoring and recordkeeping requirements
	40 CFR 60.116b(b), Subpart Kb	5.B.8		Recordkeeping requirements
	40 CFR.60.116b(c), Subpart Kb	5.B.9		Monitoring and recordkeeping requirements
AI-004 and AI-005	40 CFR 60.4237(c) and 40 CFR 60.4245(b), Subpart JJJJ	5.B.10	Operating Restriction	Monitoring and recordkeeping requirements
	40 CFR 60.4243(a)(1), Subpart JJJJ	5.B.11	Engine certification	Engine certification requirements
	40 CFR 60.4245(a), Subpart JJJJ	5.B.12	Records	Recordkeeping requirements
AI-006	40 CFR 60.4209(a) and 40 CFR 60.4214(b), Subpart IIII	5.B.13	Operating Restriction	Monitoring and recordkeeping requirements
	40 CFR 60.4211(a) and (c), Subpart IIII	5.B.14	Operating Restrictions	Operational requirements
AJ-001	40 CFR 60.486a(e), Subpart VVa	5.B.15	VOC	Monitoring and recordkeeping requirements
	40 CFR 60.486a(a)(3), Subpart VVa	5.B.16		Recordkeeping requirements
	40 CFR 60.486a(b), Subpart VVa	5.B.17		Monitoring and recordkeeping requirements
	40 CFR 60.486a(c), Subpart VVa	5.B.18		Recordkeeping requirements
	40 CFR 60.486a(j), Subpart VVa	5.B.19		Recordkeeping requirements
AD-001 and AD-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.20	VOC and Acetaldehyde	Performance stack testing
		5.B.21	Pressure Drop	Monitoring and recordkeeping requirements

AH-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.22	VOC, PM/PM_{10}, CO, and NOx	Performance stack testing
		5.B.23	Operating Restriction	Operational, monitoring, and recordkeeping requirements
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.24	Hours	Recordkeeping requirements

5.B.1 For the entire facility, the permittee shall monitor and record the monthly and the rolling, consecutive 12-month total of the following:

(a) Ethanol production in tons and gallons;

(b) DDGS production in tons;

(c) Total DDGS loadout in tons

(d) Total grain throughput in tons;

(e) Total hours of operation;

(f) Total DDGS loadout in tons;

(g) Total emissions of combined HAPs; and

(h) Total emissions of each individual HAP.

These records shall keep all supporting documents and or calculations used to generate the rolling 12 month totals required above.

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

5.B.2 For all control devices and air emission equipment, the permittee shall perform weekly maintenance inspections and record all maintenance activities performed.

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

5.B.3 For Emission Points AI-001 and AI-002, the permittee shall record and maintain records of the amount of each fuel combusted during each calendar month.

(Ref.: 40 CFR 60.48c(g)(2), Subpart Dc)

5.B.4 For Emission Groups AA-000, AB-000, and AH-000, the permittee shall perform visible emission observations (Method 22) for six minutes on a weekly basis for each emission point. If during the visible emission observation any visible emissions are observed, the permittee shall perform an EPA Reference Method 9 Visible Emission Evaluation (VEE).

The permittee shall record and maintain a log of the results of these observations/evaluations.

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

5.B.5 For Emission Points AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002, the permittee shall conduct performance stack tests on each source once every 5 years not to exceed 60 months from the previous stack test to demonstrate compliance with the PM (filterable) limitation in Condition 3.B.8 in accordance with EPA Method 5 or 17 to determine the PM concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters. Method 2 shall be used to determine the ventilation volumetric flow rate. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. Stack testing shall be performed during periods when the respective process area is being operated at or near the capacity provided in the permit application.

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

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

5.B.6 For Emission Points AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002 the permittee shall install, operate, and maintain devices for monitoring the pressure drop across each baghouse. The permittee shall comply with the following requirements for each baghouse:

(a) Establish a pressure drop range indicative of efficient PM control based upon the baghouse manufacturer's recommendation and/or the performance testing.

(b) Record the pressure drop across each baghouse on a daily basis, when the related process equipment is operating.

(c) Keep a log of the daily pressure drop readings, as well as records of the pressure drop range for each baghouse indicative of efficient operation and the basis for such range.

(d) Should a pressure drop reading outside the established range, immediately take corrective measures to restore the baghouse operating efficiency.

(e) Note any corrective measures taken in the facility records.

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

5.B.7 For Emission Points AK-001 through AK-005, the permittee shall conduct the inspections required by 40 CFR 60.113b(a)(2) through (a)(4). The permittee shall keep a record of each inspection performed as required by 40 CFR 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(Ref.: 40 CFR 60.113b(a)(2)-(4) and 40 CFR 60.115b(a)(2), Subpart Kb)

5.B.8 For Emission Points AK-001 through AK-005, the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

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

5.B.9 For Emission Points AK-001 through AK-005, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

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

5.B.10 For Emission Points AI-004 and AI-005, the permittee shall install a non-resettable hour meter upon startup of the emergency engine. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(Ref.: 40 CFR 60.4237(c) and 40 CFR 60.4245(b), Subpart JJJJ)

5.B.11 For Emission Points AI-004 and AI-005, the permittee must comply by purchasing an engine certified to the emission standards in 40 CFR Part 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. The permittee shall operate and maintain the certified stationary SI internal combustion engine and control device (if applicable) according to the manufacturer's emission-related written instructions. The permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The permittee must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance.

(Ref.: 40 CFR 60.4243(a)(1), Subpart JJJJ)

5.B.12 For Emission Points AI-004 and AI-005, the permittee must keep records of the following information:

(a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.

(b) Maintenance conducted on the engine.

(c) Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(Ref.: 40 CFR 60.4245(a), Subpart JJJJ)

5.B.13 For Emission Point AI-006, the permittee shall install a non-resettable hour meter prior to startup of the engine. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 60.4209(a) and 40 CFR 60.4214(b), Subpart IIII)

5.B.14 For Emission Point AI-006, the permittee shall operate and maintain the engine according to the manufacturer's written instructions and procedures. In addition, the only settings that will be changed are those permitted by the manufacturer. The permittee shall comply with the emission standards by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c) for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine shall be installed and configured according to the manufacturer's specifications. Any operation of the engine other than emergency operation, maintenance, and testing is prohibited.

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

5.B.15 For Emission Point AJ-001, for all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a, the permittee shall record in a log that is kept in a readily accessible location the information in 40 CFR 60.486a(e)(1) through (e)(10).

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

5.B.16 For Emission Point AJ-001, the permittee shall record the information specified below for each monitoring event required by 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a.

(a) Monitoring instrument identification.

(b) Operator identification.

(c) Equipment identification.

(d) Date of monitoring.

(e) Instrument reading.

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

5.B.17 For Emission Point AJ-001, when each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply:

(a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(b) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR Part 60.482-7a(c) and no leak has been detected during those 2 months.

(c) The identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring.

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

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

5.B.18 For Emission Point AJ-001, when each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept in a readily accessible location:

(a) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.

(b) The date the leak was detected and the dates of each attempt to repair the leak.

(c) Repair methods applied in each attempt to repair the leak.

(d) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be non-repairable, except when a pump is repaired by eliminating indications of liquids dripping.

(e) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(g) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(h) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(i) The date of successful repair of the leak.

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

5.B.19 For Emission Point AJ-001, the information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

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

5.B.20 For Emission Points AD-001 and AD-002, the permittee shall conduct biennial performance stack tests not to exceed 24 months from the previous stack test for Volatile Organic Compound (VOC) emissions in accordance with EPA Test Methods 18, 25, 25A, or an approved equivalent, and for Acetaldehyde emissions. Stack testing shall be performed during periods when the respective process area is being operated at or near the capacity provided in the permit application.

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

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

5.B.21 For Emission Points AD-001 and AD-002, the permittee shall install, operate, and maintain devices for monitoring the pressure drop across each scrubber. The permittee shall comply with the following requirements for each scrubber:

(a) Establish a pressure drop range indicative of efficient VOC control based upon the scrubber manufacturer's recommendation and/or the performance testing.

(b) Record the pressure drop across each scrubber on a daily basis, when the related process equipment is operating.

(c) Keep a log of the daily pressure drop readings, as well as records of the pressure drop range for each scrubber indicative of efficient operation and the basis for such range.

(d) Should a pressure drop reading outside the established range, immediately take corrective measures to restore the scrubber operating efficiency.

(e) Note any corrective measures taken in the facility records.

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

5.B.22 For Emission Point AH-003, the permittee shall conduct biennial performance stack tests not to exceed 24 months from the previous stack test for VOC emissions in accordance with EPA Test Methods 18, 25, 25A, or an approved equivalent; PM and PM_{10} emissions in accordance with EPA Test Methods 1-5 and 201A, or an approved equivalent; CO emissions in accordance with EPA Test Method 10, or an approved equivalent; and NOx emissions in accordance with EPA Test Method 7E, or an approved equivalent. Stack testing shall be performed during periods when the respective process area is being operated at or near the capacity provided in the permit application.

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

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

5.B.23 For Emission Point AH-003, the permittee shall install, operate, and maintain a device for continuously monitoring the temperature in the thermal oxidizer combustion chamber and shall comply with the following requirements:

(a) Maintain a minimum temperature in the combustion chamber of 1400ºF.

(b) Continuously record the temperature at 15-minute intervals, at a minimum.

(c) Should a temperature reading fall below 1400°F, immediately take corrective measures to restore the temperature to at least 1400°F.

(d) Note any corrective measures taken in the facility records.

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

5.B.24 For Emission Point AH-003, the permittee must record on a 12-month rolling total, the hours of downtime of the thermal oxidizer while the DDGS grain dryer and DDGS fluidized bed cooler were in operation.

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

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, and AC-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.C.1	PM	Submit stack test reports
AD-001 and AD-002			VOC	Submit reports of stack test results
AH-003			VOC, PM/PM_{10}, CO, and NO_x	Submit reports of stack test results
AI-001 and AI-002	40 CFR 60.48c(j), Subpart Dc	5.C.2	Fuel	Submit semiannual reports
AK-001 through AK-005	40 CFR 60.113b(a)(5), Subpart Kb	5.C.3	Internal Floating Roof Notifications	Submit notifications
	40 CFR 60.115b(a)(3), Subpart Kb	5.C.4		Submit notifications
	40 CFR 60.115b(a)(4), Subpart Kb	5.C.5		Submit notifications
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.C.6	Ethanol Production	Submit notifications
AH-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.C.7	Downtime	Submit semiannual reports

5.C.1 For Emission Points AA-001, AA-002, AB-001, AB-002, AB-003, AB-004, AC-001, AC-002, AD-001, AD-002, and AH-003, the permittee shall submit performance stack test reports of all required performance stack testing within sixty (60) days of the date the performance stack testing is performed.

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

5.C.2 For Emission Points AI-001 and AI-002, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 summarizing the amount of fuel combusted by each source on a monthly and consecutive, rolling twelve month basis.

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

5.C.3 For Emission Points AK-001 through AK-005, the permittee shall notify the MDEQ in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Condition 5.B.7 to afford the MDEQ the opportunity to have an observer present. If the inspection required by Condition 5.B.7 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the MDEQ at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the MDEQ at least 7 days prior to the refilling.

(Ref.: 40 CFR 60.113b(a)(5), Subpart Kb)

5.C.4 For Emission Points AK-001 through AK-005, if any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the DEQ within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

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

5.C.5 For Emission Points AK-001 through AK-005, the permittee shall report to the DEQ within 30 days of the inspection required by Condition 5.B.7 of any holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects. The report shall identify the storage vessel and the reason it did not meet the specifications of Condition 5.B.7 and list each repair made.

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

5.C.6 While the facility's ethanol production is not operating, the permittee is not required to comply with any applicable conditions pertaining to ethanol production. The permittee shall notify the DEQ in writing no later than ten (10) days after the start-up of ethanol production, after which any required conditions issued herein shall become effective.

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

5.C.7 For Emission Point AH-003, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 summarizing the 12-month rolling total hours of downtime of the

thermal oxidizer while the DDGS grain dryer and DDGS fluidized bed cooler were in operation.

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

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

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

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR Part 63
NMVOC	Non-Methane Volatile Organic Compounds
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR Part 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 μm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

LIST OF REGULATIONS REFERENCED IN PERMIT

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

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

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

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

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

40 CFR 60, Subpart A – General Provisions

40 CFR 60, Subpart Dc – New Source Performance Standards for for Small Industrial-Commercial Institutional Steam Generating Units

40 CFR 60, Subpart Kb – New Source Performance Standards for for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

40 CFR 60, Subpart DD – New Source Performance Standards for Grain Elevators

40 CFR 60, Subpart VVa – New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

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

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

APPENDIX C

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN
EMISSION POINTS AC-001, AC-002, AD-002, and AH-003

Ergon Biofuels, LLC
Compliance Assurance Monitoring (CAM) Plan

Ergon, Inc.

P.O. Box 1639

Jackson, Mississippi 39215-1639

9039 PER20180001

Grain Milling

I. Background/Summary Source Information

A. Emission Unit/Sources

Description: Hammermills with air emissions controlled by a baghouse

Identification: AC-001, AC-002

Pollutants: PM/PM_{10}

Permit 2780-00107 Condition 5.B.4 requires stack testing for these emission sources once during the permit lifetime. Stack testing data is used to calculate actual hourly and annual emissions.

B. Control Technology

Received grain is milled before being sent to the fermentation process. Grain is transferred from the grain storage houses by mechanical conveyors to one of two hammer mills. Each of the hammer mills has an operating rate of 77,000 lb/hr. The hammermills are controlled by a baghouse. The baghouses are used to control PM emissions from all receiving operations, which include truck and rail receiving pits, barge receiving scales, and transfer points.

II. Monitoring Approach

	Indicator No. 1	**Indicator No. 2**
Indicator	Pressure Drop	Inspection /Maintenance
Measurement Approach	Pressure Drop through baghouse is measured continuously using a differential pressure gauge.	Daily inspection according to I/M checklist; maintenance performed as needed.
Monitoring Method and Location	Baghouse inlet and outlet.	Inspections are performed at baghouse.
Indicator Range	A pressure drop greater than 5 in. H_2O is an excursion that triggers an inspection and corrective	NA

	action and reporting requirement.	
Monitoring Frequency	Continuously	Daily
Data Collection Procedures	Pressure drop is recorded daily.	Records are maintained to document daily inspections and any required maintenance.
Averaging period	NA	NA
QA/QC Practices	Quarterly Calibration of pressure gauges.	Qualified personnel perform inspection.

III. Monitoring Approach Justification

The pressure drop through the baghouse is monitored continuously. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, or the bags are becoming blinded. Decreases in pressure drop may indicate significant holes or tears or missing bags.

Implementation of a baghouse inspection and maintenance (I/M) program provides assurance that the baghouse is in good repair and operating properly. Once per day, proper operation of the compressor is verified to ensure that the bags are being cleaned. Proper operation of the cleaning cycle facilitates gas flow through the baghouse and the removal of particulate, and also helps prevent blinding of the filter bags. Operation at low pressure can result in inadequate cleaning, especially near the bottoms of the bags. Other items on the daily I/M checklist include the dump pump, induced draft fans, reverse air fans, dust screws, rotary feeders, bins, cleaning cycle operation leak check, and compartment inspection for bags.

Fermentation and Distillation

I. Background/Summary Source Information

A. Emission Unit/Sources

Description: Carbon dioxide scrubber controlling emissions from: 4 fermenters, 1 beer column, 1 rectifier column, 1 stripper column, centrifuges, and evaporators

Identification: AD-002

Pollutants: VOC, HAP

Permit 2780-00107 Condition 5.B.20 requires biennial stack testing for AD-002. Stack testing is used to calculate actual hourly and annual emissions.

B. Control Technology

Milled grain from the hammer mills is mechanically conveyed to a slurry tank in which enzymes and water are added to create the mash. The resulting mixture is heated and additional enzymes, yeast, and urea are added prior to fermentation. Mash from the cooking process is pumped to one of four fermentation vessels. In the fermentation vessels, enzymes convert the starches into simple sugars which are converted into beer and CO_2 by the yeast. After the fermentation process, beer is routed to a distillation column to separate the ethanol from the other components. The distillation system consists of a beer column, a stripping column, and a rectifying column.

II. Monitoring Approach

	Indicator No. 1	**Indicator No. 2**
Indicator	Scrubber inlet water flow rate.	pH scrubber liquid.
Measurement Approach	The scrubber inlet water flow rate is measured using a flow meter.	A sample of the underflow is taken and the pH is determined by direct reading.
Monitoring Method and Location	The scrubber inlet water flow rate is measured using a variable area flow meter located in the scrubber water.	The pH in the scrubber water effluent is measured in a water sample extracted from the scrubber underflow.
Indicator Range	An excursion is defined as any operating condition where the scrubber inlet water flow rate is less than 79 gpm. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement.	An excursion is defined as any operating condition where the underflow pH is out of the 4.5-6.5 SU range. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement.

Monitoring Frequency	The scrubber inlet water flow rate is measured and recorded twice daily.	The scrubber water outlet pH concentration is measured twice daily.
Data Collection Procedures	The scrubber inlet water flow rate is recorded twice daily in a permanent log.	A water sample is taken measured with a pH electrode and recorded in a permanent log.
QA/QC Practices	Annual Calibration and cleaning of flow meter. Acceptance criteria: +/- 5 percent of the measured value.	Only trained personnel perform sampling and analysis. Laboratory QA/QC procedures are followed. Calibration standards are prepared to ensure the pH electrode is operating accurately.

III. Monitoring Approach Justification

Based upon site performance testing, a minimum scrubber liquid flow rate within a specified pH range must be supplied to the scrubber to absorb a given amount of VOC in the gas stream, given the size of the towerend height of the packed bed. The liquid to gas ration (L/G) is a key operating parameter of the scrubber. If the L/G ratio decreases below the minimum, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur. The minimum liquid flow required to maintain proper L/G ratio at the maximum gas flow and vapor loading through the scrubber can be determined. Maintaining this minimum liquid flow, even during periods of reduced gas flow, will help ensure that the required L/G ratio is achieved at all times.

DDGS Processing and Loadout

I. Background/Summary Source Information

A. Emission Unit/Sources

Description: Thermal Oxidizer – DDGS dryer and DDGS fluidized bed cooler with emissions controlled by a regenerative thermal oxidizer. (RTO)

Identification: AH-003

Pollutants: CO, VOC, HAP

Permit 2780-00107 Condition 5.B.22 requires biennial stack testing of the thermal oxidizer. Stack testing is used to calculate actual hourly and annual emissions.

B. Control Technology

Slurry leaving the stripping side of the distillation column is routed through a series of processes to remove water including evaporation, centrifugation, and drying. From the dryer, the DDGS is sent to a cooler before being sent to storage. The DDGS are then transferred to flat storage prior to loadout. Emissions from these processes are controlled by baghouses and a regenerative thermal oxidizer. DDGS is conveyed to the loading area and shipped by truck, rail, or barge.

II. Monitoring Approach

	Indicator No. 1
Indicator	Combustion chamber temperature.
Measurement Approach	Monitor temperature using a thermocouple
Monitoring Method and Location	Direct reading of temperature in RTO combustion chamber
Indicator Range	A combustion temperature of less than 1,400 degrees F is an excursion that triggers an inspection and corrective action and reporting requirement.
Monitoring Frequency	Continuous
Data Collection Procedures	Continuous temperature readings are recorded automatically and records are maintained onsite.
Averaging period	NA
QA/QC Practices	The monitoring equipment will be maintained in good working condition according to the manufacturer's O&M procedures. The thermocouple will be changed and calibrated according to the manufacturer's specifications.

III. Monitoring Approach Justification

The combustion chamber temperature is the parameter that is most indicative of control device performance. If the combustion zone temperature decreases, complete optimum combustion may not occur resulting in an increase in VOC emissions. By maintaining the operating temperature above the minimum level, applicable control efficiencies can be achieved. Compliance with emissions limits has been demonstrated through biennial stack testing.