

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

VBM Three Rivers LLC, VBM Three Rivers
2006 Pontotoc Parkway W
Pontotoc, Mississippi
Pontotoc County

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with 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.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: _____

Permit No.: 2300-00055

SECTION 1. GENERAL CONDITIONS

- 1.1 This permit is for air pollution control purposes only.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
- 1.2 Any activities not identified in the application are not authorized by this permit.
(Ref.: Miss. Code Ann. 49-17-29(1)(b))
- 1.3 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 operating without a valid permit pursuant to State Law.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
- 1.4 It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)
- 1.5 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).)
- 1.6 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 the 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).)
- 1.7 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).)
- 1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
- 1.9 The permittee shall furnish to the Department of Environmental Quality (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).)

- 1.10 *Design and Construction Requirements:* The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

- 1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

- 1.12 *Fugitive Dust Emissions from Construction Activities:* The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

- 1.13 *General Nuisances:* The permittee shall not cause, permit, or allow the emission of particles 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.

(a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

(b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

1.14 *Right of Entry:* The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

- (a) To enter at reasonable times 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) 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 contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

1.15 *Permit Modification or Revocation:* After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

- (a) Persistent violation of any of the 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.)

1.16 *Public Record and Confidential Information:* 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)

1.17 *Permit Transfer:* This permit shall not be transferred except upon approval of the Permit Board.

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

1.18 *Severability:* The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the 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).)

- 1.19 *Permit Expiration:* The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for eighteen (18) months or more, or if construction is not completed within a reasonable time. The DEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1)., R. 2.5.C(4)., and R. 5.2.)
- 1.20 *Certification of Construction:* A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)
- 1.21 *Beginning Operation:* After certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)
- 1.22 *Application for a Permit to Operate:* The application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)
- 1.23 *Operating Under a Permit to Construct:* Upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through

properly signed contemporaneous operating logs or other relevant evidence the following:

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

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

1.25 *General Duty:* All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

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

1.26 *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).)

SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Facility ID	Description
AA-000	--	Landfill gas processing: filtering, compressing and dewatering
AA-001	EU-01	68 MMBtu/hr Flare
AA-002	EU-02	36 MMBtu/hr Thermal Oxidizer (TOX)

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Smoke	Opacity shall not exceed 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.3	Nuisance	Minimize odors and nuisances
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.4	PM (Filterable only)	Emissions shall not exceed $E = 4.1 p^{0.67}$
	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)	3.5	H ₂ S	Shall not exceed one grain per 100 scf
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.6	Fuel Requirement	Natural Gas Only
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	VOC HAP	Route all off gas to thermal oxidizer or flare
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.8	PM (Filterable only)	$E = 0.8808 * I^{-0.1667}$
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	Control Efficiency	Flare Operating Requirements

3.1 For the entire facility, 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 40 percent opacity subject to the exceptions provided in (a) and (b).

- (a) Startup operations may produce emissions which exceed 40 percent opacity for up to 15 minutes per startup in any one hour and not to exceed three startups per stack in any 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-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.)

3.2 For the entire facility, 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 percent 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, the permittee shall not cause, permit, or allow the emission of particles 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.

The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gas borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

- 3.4 For the entire facility, the permittee shall not 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 (lb/hr) and "p" is the process weight input rate in tons per year (tpy).

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

- 3.5 For the entire facility, the permittee shall not cause the emission of any gas stream which contains hydrogen sulfide (H₂S) in excess of one grain per 100 standard cubic feet. Gas streams in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than 1600°F for a period of not less than 0.5 seconds or processed in such a manner which is equivalent to or more effective for the removal of hydrogen sulfide.

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

- 3.6 For the entire facility, the permittee shall only combust natural gas, landfill gas, or waste gas (which may include renewable natural gas or waste process gas).

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

- 3.7 For the entire facility, the permittee shall route all waste gas to either the thermal oxidizer or the flare for control.

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

- 3.8 For Emission Points AA-001 and AA-002, the maximum permissible emission of ash and/or particulate matter for fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship:

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

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

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

- 3.9 For Emission Point AA-001, the permittee shall demonstrate a control efficiency of at least 98% by operating the flare according to the requirements of 40 CFR 60.18(b), Subpart A, and the requirements specified in paragraphs (a) through (e) below:

- (a) The flare shall be operated at all times when emissions may be vented to it.
- (b) The flare shall be operated and maintained according to the manufacturer’s recommendations.
- (c) The flare shall be operated with no visible emissions as determined by EPA Method 22, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
- (d) The permittee shall maintain a flare pilot flame or auto-igniter system at all times when emissions may be vented to the flare.
- (e) The flare shall only be used with a combustion gas mixture whose net heating value is 300 BTU/scf or greater if the flare is air or steam-assisted. If the flare is non-assisted, the flare shall only be used with a combustion gas mixture whose net heating value is 200 BTU/scf or greater.

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

SECTION 4. WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Work Practice
This section was intentionally left blank since no work practice standards apply to this permit action.			

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.

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, but is not limited to, 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 DEQ as required by Applicable Rules and Regulations or this permit upon request.

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

SECTION 6. REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1(a)	Report deviations within five (5) working days
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1(b)	Certification by responsible official
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).	6.1(c)	Notification of beginning actual construction within 15 days
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).	6.1(d)	Notification when construction does not begin or is suspended
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).	6.1(e)	Certification of completion of construction prior to operation
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).	6.1(f)	Notification of changes in construction

6.1 General Reporting Requirements:

- (a) 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) working days of the time the deviation began.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- (b) Any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official 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).)
- (c) Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)
- (d) The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)
- (e) Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in

accordance with the approved plans and specifications on file with the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)

- (f) The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with “as built” plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an “as built” application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

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