



# SYNTHETIC MINOR OPERATING PERMIT

**PERMITTEE:** BMP CHASTANG, LLC

FACILITY NAME: CHASTANG RNG FACILITY

LOCATION: MT. VERNON, ALABAMA

### PERMIT NUMBER DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE

503-0155-X001 Landfill Gas Treatment System

2,500 SCFM Open Process Flare 1,500 SCFM Thermal Oxidizer

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, <u>Ala. Code</u> §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, <u>Ala. Code</u> §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

**ISSUANCE DATE: DRAFT** 

Alabama Department of Environmental Management

- 1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
- 2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
- 3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
- 4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
- 5. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
- 6. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
- 7. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.
- 8. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.
- 9. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
- 10. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
- 11. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

12.	Prior to a date to be specified by the Chief of the Air Division in the authorization to
	operate, emission tests are to be conducted by persons familiar with and using the EPA
	Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title
	40, Part 60, for the following pollutants. Written tests results are to be reported to the Air
	Division within 30 days of completion of testing.

Particulates()	Carbon Monoxide()
Sulfur Dioxide()	Nitrogen Oxides()
Volatile Organic Compounds()	Visible Emissions(X)

13. Unless otherwise stated in this permit or an applicable regulation, the Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

- (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
- (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
- (c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.
- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

14. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

- 15. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
- 16. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

- 17. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
- 18. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
- 19. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
- 20. In accordance with ADEM Admin. Code r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

## **Unit Provisos**

		Regulations
SE	CTION 1APPLICABILITY	
1.	These sources have enforceable limits in order to comply with the applicable requirements of ADEM Admin Code R. 335-3-15.	ADEM Admin. Rule R. 335-3-15
2.	This source shall meet the requirements of 40 CFR 62 Subpart OOO-Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified of Reconstructed Since July 17, 2014 until ADEM Admin. Rule R. 335-3-19 becomes effective.	40 CFR Subpart OOO
3.	This source shall meet the requirements of ADEM Admin. Rule R. 335-3-19 Control of Municipal Solid Waste Landfill Gas Emissions upon EPA's final approval of that Chapter.	ADEM Admin. Rule R. 335-3-19
4.	This source shall meet the requirements of the applicable parts of New Source Performance Standards 40 CFR 60 – Subpart A – General Provisos.	ADEM Admin. Rule R. 335-3-1002(1)
5.	This source shall meet the requirements of 40 CFR 63 Subpart AAAA National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfill.	ADEM Admin. Rule R. 335-3-1106(78)
SE	CTION 2EMISSION STANDARDS	
1.	The flow to the open utility flare shall not exceed 534,480 MMBTU/yr in any consecutive 12-month period. If the flow rate exceeds this limit, the Air Division shall be notified in writing within 10 days of the exceedance.	ADEM Admin. Rule R. 335-3-15
2.	Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or use, then it must be controlled according to the control requirements of 40 CFR 63.1959(b)(2)(iii)(A) or (B).	ADEM Admin. Rule R. 335-3-1106(78) 40 CFR Subpart OOO
3.	All emissions from any atmospheric vent from the gas treatment system are subject to the control requirements of 40 CFR 63.1959(b)(2)(iii)(A) or (B).	ADEM Admin. Rule R. 335-3-1106(78) 40 CFR Subpart OOO
4.	There shall be no visible emissions from the utility flare except for periods not to exceed 5 minutes in any consecutive 2 hours.	ADEM Admin. Rule R. 335-3-1002(1)
	CTION 3COMPLIANCE AND PERFORMANCE TEST METHODS AND OCEDURES	
1.	A device that records flow to the treatment system at least every 15 minutes, must be calibrated, maintained, and operated according to the manufacturer's specifications.	ADEM Admin. Rule R. 335-3-1106(78) 40 CFR Subpart OOO
2.	The owner or operator shall maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific monitoring plan required by 40 CFR 63.1983(b)(5)(ii).	ADEM Admin. Rule R. 335-3-1106(78) 40 CFR Subpart OOO

### **SECTION 4--EMISSION MONITORING**

- 1. The owner or operator shall have a site-specific monitoring plan which includes the following:
- ADEM Admin. Rule R. 335-3-11-.06(78) 40 CFR Subpart OOO

Regulations

- a. Monitoring records of parameters that are identified in the treatment system monitoring plan and ensure that the treatment system is operating properly for the intended end use of the treated landfill gas. This should include, but not be limited to, records of filtration, dewatering, and compression parameters that ensure the treatment system is operating properly.
- b. Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.
- c. Documentation of the monitoring methods and ranges, along with justification for their use.
- d. List of responsible staff (by job title) for data collection.
- e. Processes and methods used to collect the necessary data.

#### SECTION 5--RECORDKEEPING AND REPORTING REQUIREMENTS

1. Accurate and understandable records of at least the last two years of data will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to this air permit. These records shall contain the amount of landfill gas consumed by the open process flare during each calendar month expressed in units of MMBTU.

ADEM Admin. Rule R. 335-3-15

2. The owner or operator shall submit a report on a semi-annual basis by the last day of the month following the reporting period, and include the following:

ADEM Admin. Rule R. 335-3-11-.06(78) 40 CFR Subpart OOO

- a. The quantity of landfill gas routed to the treatment system in units of SCFM.
- b. The amount of gas consumed by the open process flare during each calendar month and a rolling 12-month period, expressed in units of MMBTU. MMBTUs shall be calculated through use of the following formula:

$$\frac{\text{SCF}}{\text{min}} \times 60 \frac{\text{min}}{1 \text{ hour}} \times \frac{24 \text{hours}}{1 \text{ day}} \times \text{Avg \% CH4} \times \frac{1010 \text{BTU}}{\text{SCF}} \times \frac{1 \text{MMBTU}}{1,000,000 \text{ BTU}}$$

$$= \frac{\text{MMBTUs}}{\text{day}}$$

		Regulations
c.	The number of times the parameters for the treatment system were	
	exceeded.	
d.	A description and duration of all periods when the treatment system was	
	not operating and gas was not able to be diverted to the control device.	