

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: WARRIOR MET COAL GAS, LLC
FACILITY NAME: WELL 28-15-01
LOCATION: TUSCALOOSA COUNTY, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
413-0130-X003	Four 684 hp Mesa GV22PU 4-Stroke Rich-Burn Natural Gas-Fired Reciprocating Internal Combustion Engine Equipped with NSCR/3-Way Catalyst (NSPS Subpart JJJJ)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 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. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shutdown as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events **that exceed 1 hour** within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
7. 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.
8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the 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. Emissions tests are to be conducted for the following pollutants at intervals not to exceed once every five (5) years following the date of commencement of operation. All test reports must be submitted to the Air Division within 30 days of completion of testing.

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

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, or (2) approves the use of an equivalent method.

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.

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. 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.
19. Should this facility, at any time, exceed the applicable limits for NO_x, CO, or VOC for any engine, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.
20. 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.

21. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
22. Each engine shall be equipped and operated at all times with an NSCR/3-way catalyst in order to comply with the applicable emission limits of this Permit and 40 CFR Part 60, Subpart JJJJ. The permittee shall not operate any engine without an NSCR/3-way catalyst installed and operating.

Synthetic Minor Source Requirements

23. The permittee shall not cause or allow nitrogen oxide (NO_x) emissions from each engine to exceed 0.60 lb/hr as measured by EPA Reference Method 7E.
24. The permittee shall not cause or allow carbon monoxide (CO) emissions from each engine to exceed 1.00 lb/hr as measured by EPA Reference Method 10.
25. Each engine shall be equipped and operated at all times with an NSCR/3-way catalyst in order to comply with the applicable emission limits of this Permit. The permittee shall not operate any engine without an NSCR/3-way catalyst installed and operating.
26. Upon commencement of operation, emission testing shall be conducted on each engine for NO_x and CO once every five (5) years, with no more than 60 months following the previous performance test, using the appropriate EPA Reference Method.
27. Should any engine exceed any applicable emission standard or operational limitation, at any time, the permittee shall notify the Air Division within two working days of determining that the exceedance occurred.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

28. This unit is subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

New Source Performance Standards (NSPS) Requirements

29. This unit is subject to the applicable requirements of 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and the applicable requirements of 40 CFR Part 60, Subpart A, General Provisions. The applicable requirements include, but may not be limited to:
 - a. The permittee shall not cause or allow emissions from this engine to exceed 3.0 g/hp-hr or 250 ppmvd at 15% O₂ of NO_x; 4.0 g/hp-hr or 540 ppmvd at 15% O₂ of CO; and/or 1.0 g/hp-hr or 86 ppmvd at 15% O₂ of VOC as measured by the appropriate EPA Reference Method or an alternative method approved in advance by the Air Division [40 CFR §60.4233(e)];

- b. The permittee shall operate and maintain the certified stationary SI internal combustion engine according to the manufacturer's emission-related written instructions and shall keep records of conducted maintenance to demonstrate compliance [40 CFR §60.4243(a)(1)];
 - c. The permittee shall submit notifications as to the date construction is commenced on this engine postmarked no later than 30 days after such date and the actual date of initial startup of this engine postmarked within 15 days after such date [40 CFR §60.7(a)(1) and (3)];
 - d. The permittee shall maintain a maintenance plan on file, records of all maintenance conducted on this engine, and to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emission. These records shall be maintained on site for a period of two years and made available for inspection upon request [40 CFR §60.4243(c)];
 - e. The permittee shall maintain the applicable records specified in 40 CFR §60.4245(a), which include, but may not be limited to the following:
 - i. All notifications submitted to comply with this subpart and all documentation supporting any notification,
 - ii. Maintenance conducted on the engine, and
 - iii. Documentation that the engine meets the emission standards.
30. This facility is subject to the applicable requirements of 40 CFR Part 60, Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas facilities for which Construction, Modification or Reconstruction Commenced After December 6, 2022, and the applicable requirements of 40 CFR Part 60, Subpart A, General Provisions. The applicable requirements include, but may not be limited to:

Well Affected Facility Requirements:

- a. The permittee shall must be in compliance with the standards of this Subpart upon startup of the proposed well and must, at all times, maintain and operate the affected facility in a manner consistent with good air pollution control practices for minimizing emissions as required by 40 CFR §60.5370b.
- b. The permittee shall maintain a log for each well completion operation on a daily basis for the duration of the well completion operation and must contain the records specified in 40 CFR §60.5420b(c)(1)(iii).
- c. The Permittee must demonstrate continuous compliance with the well completion operation standards that apply to well affected facilities as required by 40 CFR §60.5415b(a).
- d. The permittee must perform the required notification, reporting and recordkeeping as required by 40 CFR §60.5420b(a)(2), (b)(1) and (2), and (c)(1).

Fugitive Equipment Components Affected Facility Requirements:

- a. The permittee shall demonstrate initial and continuous compliance with the following standards that apply to fugitive emissions components affected facilities found in 40 CFR §60.5410b(k) and §60.5415b(l):
 - i. The permittee shall develop a fugitive emissions monitoring plan as required by 40 CFR §60.5397b(b), (c), and (d) [40 CFR §60.5410b(k)];
 - ii. The permittee shall conduct an initial and subsequent periodic monitoring survey as required by 40 CFR §60.5397b(f)(3) and 40 CFR §60.5397b(g) [40 CFR §60.5410b(k) and 40 CFR §60.5415b(l)]; and
 - iii. The permittee must repair each identified source of fugitive emissions for each affected facility as required by 40 CFR §60.5397b(h) [40 CFR §60.5410b(k) and 40 CFR §60.5415b(l)].
- b. The permittee shall perform the required notification, recordkeeping, and reporting requirements that apply to fugitive emissions components and centrifugal compressor affected facilities in accordance with 40 CFR §60.5420b, which include, but may not be limited to:
 - i. Initial Annual Report as specified in 40 CFR §60.5420b(b);
 - ii. Annual Reports as specified in 40 CFR §60.5420b(b); and
 - iii. Recordkeeping requirements as specified in 40 CFR §60.5420b(c)(14) and (4), respectively.