



## SYNTHETIC MINOR OPERATING PERMIT

**PERMITTEE:** WARRIOR MET COAL GAS, LLC

FACILITY NAME: CASSIDY 6 COMPRESSOR STATION

LOCATION: TUSCALOOSA COUNTY, ALABAMA

## PERMIT NUMBER DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE

413-0102-X002 203 hp Caterpillar 4-Stroke, Rich-Burn Natural Gas-fired

Reciprocating Internal Combustion Engine equipped with a

Catalytic Converter

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. 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. 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.
- 9. 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.

- 10. 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.
- 11. 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.

- 12. 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.
- 13. 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.

14. 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.

- 15. 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.
- 16. 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.
- 17. Should this facility, at any time, exceed the limits for NO<sup>x</sup>, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.
- 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.

## **Synthetic Minor Source Requirements**

- 20. The permittee shall not cause or allow nitrogen oxide (NO<sub>x</sub>) emissions from this engine to exceed 0.59 lb/hr as measured by EPA Reference Method 7E.
- 21. This unit shall be equipped and operated at all times with a catalytic converter in order to comply with the applicable emission limits of this permit. The permittee shall not operate the engine without an active catalytic converter installed.

## **NESHAP Requirements**

- 22. The permittee shall comply with the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ, and the General Provisions of Subpart A. This engine is classified as an existing non-emergency, non-black start, 4SRB stationary RICE less than 500 hp located at an area source of HAP emissions. The applicable requirements include, but may not be limited to, the following:
  - (a) Management Practices and Other Requirements (40 CFR §63.6603 and Table 2d to Subpart ZZZZ)
    - (i) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes;
    - (ii) Change oil and filter every 1,440 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first or utilize an oil analysis program as allowed by 40 CFR §63.6625(j);
    - (iii) Inspect spark plugs every 1,440 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary;
    - (iv) Inspect all hoses and belts every 1,440 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary; and
  - (b) Compliance Requirements (40 CFR §63.6640 and Table 2d to Subpart ZZZZ)
    - (i) Operate and maintain this unit according to the manufacturer's emission-related written instructions; or,
    - (ii) Develop and follow a maintenance plan that provides for, to the extent practicable, the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.
  - (c) Recordkeeping (40 CFR §63.6603(f), 40 CFR §63.6655, and 40 CFR §63.6660)

- (i) Maintain on-site for the life of the engine either a copy of the manufacturer's emission-related operation and maintenance instructions for each unit or the maintenance plan developed in accordance with 40 CFR §63.6640;
- (ii) Maintain records of the maintenance conducted on this engine;
- (iii) Maintain all required records in a form suitable and readily available for expeditious review (hard copy or electronic form) for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.