

# SYNTHETIC MINOR OPERATING PERMIT

**PERMITTEE:** DOTIER, LLC  
**FACILITY NAME:** DOTIER DATA CENTER  
**LOCATION:** MONTGOMERY, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
209-0108-X005	>2,237 kW (3,000 hp) Emergency Stationary Compression Ignition Internal Combustion Engine Equipped with Diesel Fuel Storage Tank (Group 5) [NSPS, Subpart IIII]

*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. 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. 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.

13. 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.
14. 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.
15. 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.

- 16. 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.
- 17. 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.
- 18. Should this facility, at any time, exceed the limits for NO<sub>x</sub>+NMHC, CO or PM, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.
- 19. 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.
- 20. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

#### **Synthetic Minor Source Requirements**

- 21. The permittee shall not allow the collective operation of each emergency CI ICE to exceed **500 hours of operation** during any consecutive 12-month period

22. The permittee shall maintain records of the hours of operation on a monthly and 12-month rolling total basis. The permittee shall maintain these records on-site and make these records available for inspection upon request. These records shall be retained for a period of two (2) years from the date of generation of each record.
23. Should this facility, at any time, exceed the hours of operation limit, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.

#### **NESHAP Requirements**

24. These units are 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.

#### **NSPS Requirements**

25. These units are subject to the applicable requirements of 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) 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 these engines to exceed 6.4 g/kW-hr of NO<sub>x</sub>+NMHC, 3.5 g/kW-hr of CO, and 0.2 g/kW-hr of PM as measured by the appropriate EPA Reference Method or an alternative method approved in advance by the Air Division [40 CFR §60.4205(b)];
  - b. The exhaust opacity from the emergency CI ICE must not exceed:
    - i. 20 percent during the acceleration mode;
    - ii. 15 percent during the lugging mode; and
    - iii. 50 percent during the peaks in either the acceleration or lugging modes [40 CFR §60.4205(b)];
  - c. The permittee must purchase engines certified to the emissions standards specified in 40 CFR §60.4205(b) for the same model year and maximum engine power. These engines must be installed and configured according to the manufacturer's emission-related specification [40 CFR §60.4211(c)];
  - d. These units meet the definition of certified stationary CI ICE, the permittee shall operate and maintain the certified stationary CI ICE according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR §1068, as they apply [40 CFR §60.4211(a)];
  - e. The permittee must use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel and shall maintain records of the sulfur content and either the

Cetane index or aromatic content of the diesel fuel that is burned in the emergency CI ICE [40 CFR §60.4207(b)];

- f. The permittee shall install and operate a non-resettable hour meter on these emergency CI ICE [40 CFR §60.4209(a)];
- g. The permittee shall maintain and record the hours of operation of these emergency CI ICE that is recorded through the non-resettable hour meter. The permittee shall 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 [40 CFR §60.4214(b)];
- h. Please note further limitations in Proviso No. 21. However, according to NSPS, there is no time limit on the use of the engine in emergency situations. However, the permittee is limited to operating the engine for the purpose of maintenance checks and readiness testing to no longer than 100 hours per year. The permittee may operate the proposed emergency CI ICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations shall not be used for peak shaving except as provided in 40 CFR §60.4211(f)(3)(i) 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. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited [40 CFR §60.4211(f)];

# SYNTHETIC MINOR OPERATING PERMIT

**PERMITTEE:** DOTIER, LLC  
**FACILITY NAME:** DOTIER DATA CENTER  
**LOCATION:** MONTGOMERY, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
209-0108-X006	≤2,237 kW (3,000 hp) Emergency Stationary Compression Ignition Internal Combustion Engine Equipped with Diesel Fuel Storage Tank (Group 6) [NSPS, Subpart IIII]

*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:** Date

---

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. 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.

13. 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.
14. 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.
15. 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.

- 16. 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.
- 17. 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.
- 18. Should this facility, at any time, exceed the limits for NO<sub>x</sub>+NMHC, CO or PM, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.
- 19. 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.
- 20. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

#### **Synthetic Minor Source Requirements**

- 21. The permittee shall not allow the collective operation of each emergency CI ICE to exceed **500 hours of operation** during any consecutive 12-month period.

22. The permittee shall maintain records of the hours of operation on a monthly and 12-month rolling total basis. The permittee shall maintain these records on-site and make these records available for inspection upon request. These records shall be retained for a period of two (2) years from the date of generation of each record.
23. Should this facility, at any time, exceed the hours of operation limit, the permittee shall notify the Air Division within two (2) working days of determining that the exceedance occurred.

#### **NESHAP Requirements**

24. These units are 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.

#### **NSPS Requirements**

25. These units are subject to the applicable requirements of 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) 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 these engines to exceed 6.4 g/kW-hr of NO<sub>x</sub>+NMHC, 3.5 g/kW-hr of CO, and 0.2 g/kW-hr of PM as measured by the appropriate EPA Reference Method or an alternative method approved in advance by the Air Division [40 CFR §60.4205(b)];
  - b. The exhaust opacity from the emergency CI ICE must not exceed:
    - i. 20 percent during the acceleration mode;
    - ii. 15 percent during the lugging mode; and
    - iii. 50 percent during the peaks in either the acceleration or lugging modes [40 CFR §60.4205(b)];
  - c. The permittee must purchase engines certified to the emissions standards specified in 40 CFR §60.4205(b) for the same model year and maximum engine power. These engines must be installed and configured according to the manufacturer's emission-related specification [40 CFR §60.4211(c)];
  - d. These units meet the definition of certified stationary CI ICE, the permittee shall operate and maintain the certified stationary CI ICE according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR §1068, as they apply [40 CFR §60.4211(a)];
  - e. The permittee must use diesel fuel that meets the requirements of 40 CFR §1090.305 for nonroad diesel fuel and shall maintain records of the sulfur content and either the

Cetane index or aromatic content of the diesel fuel that is burned in the emergency CI ICE [40 CFR §60.4207(b)];

- f. The permittee shall install and operate a non-resettable hour meter on these emergency CI ICE [40 CFR §60.4209(a)];
- g. The permittee shall maintain and record the hours of operation of these emergency CI ICE that is recorded through the non-resettable hour meter. The permittee shall 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 [40 CFR §60.4214(b)];
- h. Please note further limitations in Proviso No. 21. However, according to NSPS, there is no time limit on the use of the engine in emergency situations. However, the permittee is limited to operating the engine for the purpose of maintenance checks and readiness testing to no longer than 100 hours per year. The permittee may operate the proposed emergency CI ICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations shall not be used for peak shaving except as provided in 40 CFR §60.4211(f)(3)(i) 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. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited [40 CFR §60.4211(f)];