

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
PERMIT**

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Calgon Carbon Corporation
13121 Webre Road
Bay St. Louis, Mississippi
Hancock County

“Department of Defense (DOD) Project”

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: OCT 17 2017

Permit No.: 1000-00015

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
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).)
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).)
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).)
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).)
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).)
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).)
9. The permittee shall furnish to the 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).)

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.)
11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)
12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants." (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
13. 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).)
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 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) At reasonable times 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 emissions. (Ref.: Miss. Code Ann. 49-17-21)
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.)

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)
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)
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).)
19. **Permit Expiration:** The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(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).)
21. **Beginning Operation:** Except as prohibited in Section 1, Condition 24 of this permit, 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).)
22. **Application for a Permit to Operate:** Except as otherwise specified in Section 1, Condition 24 of this permit, 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).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Section 1, Condition 24 of this permit, 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).)
24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to “net” out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)
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).)
26. Deviation Reporting: Except as otherwise specified herein, 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(10).)
27. 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).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. 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).)
2. 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).)
3. 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).)
4. 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).)

**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	Description
AA-023	Dryer Baghouse 1
AA-024	Dryer Baghouse 2
AA-025	Material Handling Baghouse
AA-026	TEDA Baghouse
AA-027	Chemical Handling Baghouse
AA-028A	Two (2) Natural Gas-Fired Dryers with combined heat capacity of 9 MMBTU/hr
AA-028B	
AA-029	75 hp Diesel Emergency Generator – Installed in 2018 – Subject to NSPS Subpart IIII and MACT Subpart ZZZZ
AA-030	Cooling Tower

**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. and B.	3.1	Opacity	< 40%
AA-028A AA-028B	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.2	PM (filterable only)	0.6 lb/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.3	SO ₂	4.8 lb/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.4	Fuel	Natural Gas Only
AA-029	40 CFR 63.6585, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines	3.5	HAP	Applicability
	40 CFR 63.6590(c), Subpart ZZZZ	3.6		Comply with NSPS Subpart IIII
	40 CFR 60.4200(a)(2)(i), Subpart IIII – New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines	3.7	NMHC/CO/NO _x /PM	Applicability
	40 CFR 60.4205(b), Subpart IIII	3.8		Comply with 40 CFR 60.4202 for same model year and maximum engine power
	40 CFR 60.4202(a)(2), Subpart IIII	3.9		Comply with 40 CFR 89.112 and 113
	40 CFR 60.4207(b), Subpart IIII	3.10	Fuel	Comply with 40 CFR 80.510(b) for non-road diesel.
	40 CFR 4209(a), Subpart IIII	3.11	Hours of Operation	Install a non-resettable hour meter
	AA-023 AA-024 AA-025 AA-026 AA-027	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). Federally Enforceable PSD Moderate Modification Avoidance Limit	3.12	PM/PM ₁₀ /PM _{2.5}

3.1 For the entire facility, the permittee shall not cause, permit, or allow emissions of smoke from any point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) and (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60% opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) 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. and B.)

- 3.2 For Emission Points AA-028A and AA-028B, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

- 3.3 For Emission Points AA-028A and AA-028B, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measures as sulfur dioxide) per million BTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

- 3.4 For Emission Points AA-028A and AA-028B, the permittee shall only burn natural gas.

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

- 3.5 For Emission Point AA-029, the permittee is subject to and shall comply with all applicable provisions of the National Emission Standard for Hazardous Air Pollutants from Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and the General Provisions (40 CFR 63, Subpart A). Emission Point AA-029 is a 2007 model year or later 75 hp Diesel Emergency Generator.

(Ref.: 40 CFR 63.6585, Subpart ZZZZ)

- 3.6 For Emission Point AA-029, the permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by complying with the applicable requirements in 40 CFR 60, Subpart III.

(Ref.: 40 CFR 63.6590(c), Subpart ZZZZ)

3.7 For Emission Point AA-029, the permittee is subject to and shall comply with all applicable requirements of the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart III) and the General Provisions (40 CFR 60, Subpart III).

(Ref.: 40 CFR 60.4200(a)(2)(i), Subpart III)

3.8 For Emission Point AA-029, the permittee shall comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power.

(Ref.: 40 CFR 60.4205(b), Subpart III)

3.9 For Emission Point AA-029, the permittee shall comply with the requirements in 40 CFR 89.112 and 89.113 for the same model year and maximum engine power.

(Ref.: 40 CFR 60.4202(a)(2), Subpart III)

3.10 For Emission Point AA-029, the permittee shall only use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel.

(Ref.: 40 CFR 60.4207(b), Subpart III)

3.11 For Emission Point AA-029, the permittee shall install a non-resettable hour meter prior to startup of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart III)

3.12 For Emission Points AA-023, AA-024, AA-025, AA-026, and AA-027, control equipment shall be operated at all times when emissions may be vented to it.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), and Federally Enforceable PSD Moderate Modification Avoidance Limit)

**“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
AA-028A AA-028B	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.1	Fuel	Amount of Fuel Combusted
AA-029	40 CFR 60.4206, Subpart III	5.2	Compliance	Comply for Life of the Engine.
	40 CFR 60.4211(a), Subpart III	5.3	Compliance	Operate and Maintain according to manufacturer's written instructions
	40 CFR 60.4211(c), Subpart III	5.4		
	40 CFR 60.4211(f), Subpart III	5.5	Hours of Operation	Non-emergency Operation
	40 CFR 60.4214(b), Subpart III	5.6		Recordkeeping
AA-023 AA-024 AA-025 AA-026 AA-027	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.7	Control Devices	Record any times the control device is not operated when emissions are vented to it.
		5.8	Visible Emissions	Weekly Inspections for Visible Emissions
		5.9	Maintenance Inspections	Weekly Maintenance Inspections
		5.10	Recordkeeping	Maintain records of each visible emissions inspection and maintenance inspections

5.1 For Emission Points AA-028A and AA-028B, the permittee shall maintain records of the type and quantity of fuels used on a daily basis.

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

5.2 For Emission Point AA-029, the permittee shall operate and maintain the stationary compression ignition internal combustion engine (CI ICE) that meets the emission standards in 40 CFR 60.4205(b) (Condition 3.8) for the entire life of the engine.

(Ref.: 40 CFR 60.4206, Subpart III)

5.3 For Emission Point AA-029, the permittee shall comply with the following:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

(Ref.: 40 CFR 60.4211(a), Subpart III)

5.4 For Emission Point AA-029, the engine shall be installed and configured according to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c), Subpart III)

5.5 For Emission Point AA-029, the permittee shall comply with the following:

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in Condition 5.5(3) and (4) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 5.5(4) counts as part of the 100 hours per calendar year. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition to MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f), Subpart III)

- 5.6 For Emission Point AA-029, the permittee is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 60.4214(b), Subpart III)

- 5.7 For Emission Points AA-023, AA-024, AA-025, AA-026, and AA-027, the permittee shall record any time that a control device is not operated while emissions from the respective process are vented. Include the Emission Point ID, date, time, and duration of each occurrence.

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

- 5.8 For Emission Points AA-023, AA-024, AA-025, AA-026, and AA-027, the permittee shall conduct weekly EPA Test Method 22 inspections for visible emissions (one-minute interval). If any visible emissions are observed, a visible emissions evaluation shall be conducted by a certified observer on the same day of the inspection to determine the opacity in accordance with EPA Test Method 9 found in 40 CFR 60, Appendix A. All visible emissions inspections shall be conducted while the source is operating.

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

- 5.9 For Emission Points AA-023, AA-024, AA-025, AA-026, and AA-027, the permittee shall perform weekly maintenance inspections on each control device to ensure proper operation. If any problems are found, the process shall be shut down until the control device is fully operational and consistent with the manufacturer's specifications.

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

- 5.10 For Emission Points AA-023, AA-024, AA-025, AA-026, and AA-027, the permittee shall maintain a log recording the following:

- (a) The date, time, and emission point inspected;
- (b) Whether the control device is operating within manufacturers specifications;
- (c) Whether any air emissions (except for water vapor) were visible from the emission point;
- (d) The results of all Method 9 opacity determinations;
- (e) Any corrective action taken as a result of visible emissions observed and/or exceeding the opacity;
- (f) Any corrective action taken as a result of the control device not operating correctly.

This log may be maintained in hard copy or electronic form as long as it is available on-site for inspection by DEQ personnel.

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