# STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

# AND PREVENTION OF SIGNIFICANT DETERIORATION AUTHORITY TO CONSTRUCT AIR EMISSIONS EQUIPMENT THIS CERTIFIES THAT

Chemours Company FC LLC The Delisle Plant 7685 Kiln DeLisle Road Pass Christian, Harrison, Mississippi

#### "Boiler MACT Project"

has been granted permission to construct air emissions equipment to comply with 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 and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: January 9, 2015 Modified: JAN 1 0 2017

Permit No.: 1020-00115

#### Part I.

#### 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. 1.1.10, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (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 Part I, 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 Part I, 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 Part I, 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. 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), & (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, 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).)

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).)

## Part II. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment associated with the Boiler MACT Project as described in the following table.

Emission Point ID	Description		
Steam Generation			
AF-101A	Boiler No. 1 with a heat input capacity of 240 MMBTU/hr and coal-fired. Previously identified as emission point AA-307A.		
AF-101B	Boiler No. 2 with a heat input capacity of 240 MMBTU/hr and coal-fired. Previously identified as emission point AA-307B.		
AF-204	Boiler No. 4 with a heat input capacity of 295 MMBTU/hr and fired only on natural gas. The boiler is equipped with low-NO <sub>X</sub> burners and flue gas recirculation (FGR).		
AF-205	Boiler No. 5 with a heat input capacity of 295 MMBTU/hr and fired only on natural gas. The boiler is equipped with low-NO <sub>X</sub> burners and flue gas recirculation (FGR).		

The conditions outlined in the following sections of this permit apply in accordance with the compliance option selected.

Emission Point ID	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard		
	Steam Generation					
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.1	PM (filterable only)	$E = 0.8808 * I^{0.1667}$		
AF-101A AF-101B	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.2	$SO_2$	4.8 lb/MMBtu		
AF-204 AF-205	40 CFR 63, Subpart DDDDD (§63.7485)	3.3	НАР	Applicability with compliance extension		
	40 CFR 63, Subpart DDDDD (§63.7500(e))	3.4	ПАР	Comply with standards at all times, except during startup and shutdown		
	11 Miss. Admin. Code Pt. 2, R.2.2.B(10).	3.5	5 Operation	Boilers no longer authorized for operation after January 13, 2017		
	40 CFR 51, Subpart BB (§51.1203(e))	5.5				
AF-101A AF-101B	PSD Construction Permit issued January 9, 2015 and modified January 10, 2017	3.6	Fuel Restriction	Natural Gas only		
AI-101B			СО	BACT: 0.06 lb/MMBtu (3-hr average)		
			0	BACT: Good Combustion Practices		
			CO <sub>2</sub> e (GHG)	BACT: 123,259 tpy (12-month rolling total)		
	PSD Construction Permit issued January 9, 2015, and modified January 10, 2017	3.6	Fuel Restriction	Natural Gas only		
			СО	BACT: 0.04 lb/MMBtu (3-hr average)		
				BACT: Good Combustion Practices		
15.004			CO <sub>2</sub> e (GHG)	BACT: 151,302 tpy (12-month rolling total)		
AF-204 AF-205	40 CFR 60, Subpart Db (§60.44b(a))	3.7	NOx	Applicability		
	40 CFR 60, Subpart Db (§60.42b(k)(2))	3.8	SO <sub>2</sub>	Exemption from SO <sub>2</sub> limit		
	40 CFR 60, Subpart Db (§60.44b(a)(1), 60.44b(h), 60.44b(i))	3.9	NO <sub>X</sub>	0.20 lb/MMBtu (30-day rolling average)		

Part III. EMISSION LIMITATIONS AND STANDARDS

3.1 For Emission Points AF-101A, AF-101B, AF-204, and AF-205, the permittee shall not have particulate emissions from fossil fuel burning installations of greater than 10 million BTU per hour heat input that exceeds the emission rate as determined by the relationship  $E = 0.8808 * I^{-0.1667}$ , where *E* is the emission rate in pounds per million BTU per hour heat input and *I* is the heat input in millions of BTU per hour.

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

3.2 For Emission Points AF-101A, AF-101B, AF-204, and AF-205, the permittee shall not discharge sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.3 For Emission Points AF-101A, AF-101B, AF-204, and AF-205, the permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heater, 40 CFR 63, Subpart DDDDD.

Emission Points AF-101A and AF-101B are existing large boilers that qualify as units designed to burn gas 1 fuel subcategory and Emission Points AF-204 and AF-205 are new large boilers that qualify as units designed to burn gas 1 fuel subcategory. As such, these units have no emission or operating limits, but are required to comply with the applicable work practice, recordkeeping and reporting requirements found later in this permit.

In accordance with the letter dated May 13, 2014, from MDEQ, the compliance deadline for 40 CFR 63, Subpart DDDDD, has been extended until January 31, 2017. See the closure deadline in Condition 3.5.

(Ref.: 40 CFR 63.7485, Subpart DDDDD, and Compliance Extension Letter dated May 13, 2014)

3.4 For Emission Points AF-101A, AF-101B, AF-204, and AF-205, the permittee shall be in compliance with the 40 CFR 63, Subpart DDDDD standards at all times, except during periods of startup and shutdown, during which time the permittee must comply only with Table 3 of 40 CFR 63, Subpart DDDDD.

(Ref.: 40 CFR 63.7500(e), Subpart DDDDD)

3.5 For Emission Points AF-101A and AF-101B, the permittee shall cease operation on or before January 13, 2017. In accordance with 40 CFR 51, Subpart BB, Data Requirements for Characterizing Air Quality for the Primary SO<sub>2</sub> NAAQS, the removal from operation of these coal-fired boilers ensures that the source's total potential-to-emit sulfur dioxide is below 2,000 tons per year.

(Ref.: 40 CFR 51.1203(e), Subpart BB, and 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).)

3.6 For Emission Points AF-101A, AF-101B, AF-204, and AF-205, the permittee shall comply with the operating and BACT limits established in the Part III table above.

3.7 For Emission Points AF-204 and AF-205, the permittee is subject to and shall comply with all applicable requirements of the New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units greater than 100 MMBtu/hr (40 CFR Part 60, Subpart Db) and the applicable requirements of the General Provisions (40 CFR Part 60, Subpart A).

(Ref.: 40 CFR 60.40b(a), Subpart Db)

3.8 For Emission Points AF-204 and AF-205, the permittee is exempt from the SO<sub>2</sub> emission limit in §60.42b(k)(1) due to combustion of only pipeline quality (low sulfur) natural gas with a potential SO<sub>2</sub> emission rate of 0.32 lb/MMBtu heat input or less.

(Ref.: 40 CFR 60.42b(k)(2), Subpart Db)

3.9 For Emission Points AF-204 and AF-205, the permittee shall not discharge gases containing NO<sub>X</sub> (expressed as NO<sub>2</sub>) in excess of 0.20 lb/MMBtu heat input. This NO<sub>X</sub> standard applies at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis.

(Ref.: 40 CFR 60.44b(a)(1), 60.44b(h), 60.44b(i), Subpart Db)

Emission Point ID	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Work Practice
Steam Generation				
AF-204	40 CFR 63, Subpart DDDDD (§63.7515(d) and §63.7540(a)(12); §63.7540(a)(10); §63.7540(a)(13))	4.1 4.2 4.3	НАР	Conduct periodic tune-ups every five (5) years thereafter
AF-205	40 CFR 63, Subpart DDDDD (§63.7500(a)(3))	4.4	НАР	Operate and maintain sources in a manner consistent with safety and good air pollution control practices for minimizing emissions

Part IV. WORK PRACTICES

4.1 For Emission Points AF-204 and AF-205 (which are equipped with continuous oxygen trim systems to maintain optimum air/fuel ratios), the permittee must conduct an initial compliance demonstration and conduct tune-ups every five (5) years in accordance with \$63.7540(a)(12), with each tune-up being performed no more than 61 months after the previous tune-up. The permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected once every 72 months.

(Ref.: 40 CFR 63.7510(g) and (f), 63.7515(d) and 63.7540(a)(12), Subpart DDDDD)

- 4.2 For Emission Points AF-204 and AF-205, the permittee must conduct tune-ups to demonstrate continuous compliance as specified in the following paragraphs:
  - (a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled shutdown);
  - (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled shutdown);
  - (d) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>X</sub> requirement to which the unit is subject;
  - (e) Measure the concentrations in the effluent stream of carbon monoxide in parts per million by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long

as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

- (f) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (1) through (3) of this below,
  - (1) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured as high fire or typical operating load, before and after the tune-up of the unit;
  - (2) A description of any correction actions taken as a part of the tune-up; and
  - (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(Ref.: 40 CFR 63.7540(a)(12), Subpart DDDDD)

4.3 Upon startup for Emission Points AF-204 and AF-205, if the emission point is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(Ref.: 40 CFR 63.7540(a)(13), Subpart DDDDD)

4.4 Upon startup for Emission Points AF-204 and AF-205, the permittee shall, at all time, operate and maintain the affected sources, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Agency that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.7500(a)(3), Subpart DDDDD)

Emission Point ID	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring and Recordkeeping Requirement		
	Steam Generation					
	PSD Construction Permit issued January 9, 2015, and modified January 10, 2017	5.1	Fuel Restriction	Maintain fuel records		
		5.2	СО	Conduct initial stack test within 180 days of the certification of construction		
		5.3	CO <sub>2</sub> e (GHG)	Calculate CO <sub>2</sub> e emissions monthly and on a 12-month rolling basis		
	40 CFR 63, Subpart DDDDD (§63.7555(a))	5.4	НАР	Recordkeeping – Notifications, Compliance Demonstrations, and Performance Evaluations		
	40 CFR 63, Subpart DDDDD (§63.7560)	5.5	HAP	Recordkeeping – General		
AF-204 AF-205	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(b)(2).	5.6	Records Retention	Maintain all records for five (5) years from the date generated		
	40 CFR 60, Subpart Db (§60.49b(d)(2))	5.1		Monthly Fuel Usage Recordkeeping		
	40 CFR 60, Subpart Db (§60.48b(b)(1), (c), (d), (e), and (f))	5.7		Install, calibrate, maintain, and operate a CEMS to measure NO <sub>X</sub>		
	40 CFR 60, Subpart Db (§60.46b(c) and (e))	5.8	NOx	Performance testing requirements		
	40 CFR 60, Subpart Db (§60.49b(g))	5.9		Operating data recordkeeping requirements		
	40 CFR 60, Subpart A (§60.7(f))	5.10		NO <sub>x</sub> CEMS recordkeeping requirements		
	PSD Construction Permit issued January 9, 2015, and modified January 10, 2017	5.1	Fuel Restriction	Maintain fuel records		
	40 CFR 63, Subpart DDDDD (§63.7555(a))	5.4	НАР	Recordkeeping – Notifications, Compliance Demonstrations, and Performance Evaluations		
AF-201A AF-201B	40 CFR 63, Subpart DDDDD (§63.7560)	5.5	НАР	Recordkeeping – General		
	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(b)(2).	5.6	Records Retention	Maintain all records for five (5) years from the date generated		
	PSD Construction Permit issued January 9, 2015, and modified January 10, 2017	5.11	SO <sub>2</sub>	Recordkeeping – Closure		

## Part V. MONITORING AND RECORDKEEPING REQUIREMENTS

5.1 For Emission Points AF-201A, AF-201B, AF-204, and AF-205, the permittee shall record and maintain records of the amount of fuel combusted per boiler during each calendar month.

(Ref.: 40 CFR 60.49b(d)(2) and PSD Construction Permit issued January 9, 2015, and modified January 10, 2017)

5.2 For Emission Points AF-204 and AF-205, within 180 days of certification of construction, the permittee shall conduct an initial stack test for each emission unit to demonstrate compliance with the applicable CO limit established in Part III. The permittee shall conduct the stack test using EPA Reference Method 10, or other EPA-approved method, and shall operate each source as close to its maximum rated capacity as operating conditions allow. To demonstrate compliance with the lb/MMBtu CO emission limit, the heat input shall be determined during each stack test run.

(Ref.: PSD Construction Permit issued January 19, 2015, and modified January 10, 2017)

5.3 For Emission Points AF-204 and AF-205, the permittee shall demonstrate compliance with the CO<sub>2</sub>e limits established in Part III by recording natural gas flow rate to each boiler and natural gas heating value on a monthly basis. The monthly CO<sub>2</sub>e emissions shall be determined by multiplying the monthly heat input to each boiler by the appropriate emission factor from Table C-1 of 40 CFR 98, Subpart C. The permittee shall also calculate and record CO<sub>2</sub>e emissions on a 12-month rolling basis.

- 5.4 For Emission Points AF-201A and AF-201B, and upon startup for Emission Points AF-204 and AF-205, the permittee shall keep the following records:
  - (a) A copy of each notification and report that permittee submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that permittee submitted, according to the requirements in §63.10(b)(2)(xiv).
  - (b) Records of compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
  - (Ref.: 40 CFR 63.7555(a), Subpart DDDDD)
- 5.5 For Emission Points AF-201A and AF-201B, and upon startup for Emission Points AF-204 and AF-205, the permittee shall maintain records as outlined in paragraphs (a) through (c) below:
  - (a) Records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).
  - (b) As specified in §63.10(b)(1), each record must be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Each record must be kept on site, or records must be accessible from on site (for example, through a computer network), for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). Records may be kept off site for the remaining three (3) years.

(Ref.: 40 CFR 63.7560, Subpart DDDDD)

5.6 For Emission Points AF-201A, AF-201B, AF-204, and AF-205, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records and reports may be maintained in electronic form as long as they are available at the facility for review by MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(b)(2).)

5.7 For Emission Points AF-204 and AF-205, the permittee shall install, calibrate, maintain, and operate CEMS for measuring NO<sub>X</sub> and O<sub>2</sub> (or CO<sub>2</sub>) emissions discharged to the atmosphere, and shall record the output of the system. The CEMS shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. The 1-hour average NO<sub>X</sub> emission rates measured by the continuous NO<sub>X</sub> monitor shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.13(h)(2). The procedures under §63.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The span value of the NO<sub>X</sub> analyzer shall be 500 ppm.

When  $NO_X$  emission data are not obtained because of CEMS breakdown, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of Appendix A, Method 7A of Appendix A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

(Ref.: 40 CFR 60.48(b)(1), (c), (d), (e), and (f), Subpart Db)

5.8 For Emission Points AF-204 and AF-205, the permittee shall conduct the performance test as required under 60.8 using the continuous system for monitoring NO<sub>X</sub> under 60.48(b), as required herein. For the initial compliance test, NO<sub>X</sub> emissions from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>X</sub> emission standards in Condition 3.8. The 30-day average emission rate is calculated as the average of all the hourly emission data recorded by the monitoring system during the 30-day test period.

Following the date on which the initial performance test is completed or is required to be completed under 60.8, whichever date comes first, the permittee shall determine compliance with the NO<sub>x</sub> standards in Condition 3.8 on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub> emission data for the preceding 30 steam generating unit operating days.

(Ref.: 40 CFR 60.46b(c) and (e), Subpart Db)

- 5.9 For Emission Points AF-204 and AF-205, the permittee shall maintain records of the following information for each steam generating unity operating day:
  - (a) Calendar date;
  - (b) The average hourly NO<sub>X</sub> emission rates (expressed as NO<sub>2</sub>) (lb/MMBtu heat input) measured or predicted;
  - (c) The 30-day average NO<sub>X</sub> emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
  - (d) Identification of the steam generating unit operating days when the calculated 30day average NO<sub>X</sub> emission rates are in excess of the NO<sub>X</sub> emissions standards in Condition 3.8, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - (e) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - (f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - (g) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - (h) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - (i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - (j) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.

(Ref.: 40 CFR 60.49b(g), Subpart Db)

5.10 For Emission Points AF-204 and AF-205, the permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, in accordance with the provisions of 40 CFR 60.7(f).

(Ref.: 40 CFR 60.7(f), Subpart A)

5.11 For Emission Points AF-201A and AF-201B, the permittee shall maintain a record of the closure of the emission units. The record must include the date of the closure and a description of how the units were rendered inoperable.

Part VI.			
<b>REPORTING REQUIREMENTS</b>			

Emission Point ID	Applicable Requirement	Condition Number(s)	Reporting Requirement		
Steam Generation					
	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(2).	6.1	Report any permit deviations within 5 days		
	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).	6.2	Submit semiannual reports		
	40 CFR 63, Subpart DDDDD (§63.7530(d) and (e), and 63.7545(e))	6.3	Notifications – Compliance Status		
	40 CFR 63, Subpart DDDDD (§63.7545(a))	6.4	Notifications – General		
	40 CFR 63, Subpart DDDDD (§63.7550(a) and (b), and Table 9)	6.5	Compliance Reports – Schedule		
	40 CFR 63, Subpart DDDDD (§60.7550(c))	6.6	Compliance Reports – Content		
AF-204	11 Miss. Admin. Code Pt. 2, R.6.3.C(1); and 40 CFR 63, Subpart DDDDD (§63.7550(h)(3))	6.7	Compliance Reports – Submissions		
AF-205	PSD Construction Permit issued January 9, 2015, and modified January 10, 2017	6.8	Notification and reporting requirements for stack tests		
	40 CFR 60, Subpart A (§60.7(a)(1))	6.9	Submit notification of the date of construction		
	40 CFR 60, Subpart Db (§60.49b(a)(1) and 60.7(a)(3))	6.10	Submit initial notification of startup		
	40 CFR 60, Subpart A (§60.7(a)(5))	6.11	Submit notification of date CEMS demonstration of performance is to commence		
	40 CFR 60, Subpart Db (§60.49b(b))	6.12	Submit initial performance test		
	40 CFR 60, Subpart A (§60.7(c), (d), and (e)); and 40 CFR 60, Subpart Db (§60.49b(h) and (w))	6.13	Submit Excess Emissions and Monitoring Systems Performance Reports		
	40 CFR 60, Subpart Db (§60.49b(g), (i), and (w))	6.14	Submit operating data reports		
AF-201A AF-201B	PSD Construction Permit issued January 9, 2015 and modified January 10, 2017	6.15	Closure notification		

6.1 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. Such report shall be made within five (5) days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(2).)

6.2 The permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R.6.2.E.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

6.3 For Emission Points AF-204 and AF-205, the permittee shall submit a signed statement in the Notification of Compliance Status report that indicates the tune-up of the unit required in Part III of this permit have been completed.

The Notification of Compliance Status shall be submitted no later than 60 days after the completion of all the initial compliance demonstration activities for each boiler at the facility and shall include the required statements from above and all the information specified in 40 CFR 63.7545(e)(1) through (8).

(Ref.: 40 CFR 63.7530(d) and (e), and 63.7545(e), Subpart DDDDD)

6.4 For Emission Points AF-204 and AF-205, the permittee shall submit all applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified.

(Ref.: 40 CFR 63.7545(a), Subpart DDDDD)

6.5 Upon startup for Emission Points AF-204 and AF-205, the permittee must submit compliance reports to MDEQ every five (5) years, postmarked no later than January 31 for the preceding 5-year period. The first submission will be due January 31, 2022.

(Ref.: 40 CFR 63.7550(a) and (b), and Table 9 of Subpart DDDDD)

- 6.6 For Emission Points AF-204 and AF-205, the permittee must prepare compliance reports containing the applicable information outlined in the following paragraphs:
  - (a) Company and Facility name and address.
  - (b) Process unit information, emissions limitations, and operating parameter limitations.

- (c) Date of report and beginning and ending date of the reporting period.
- (d) The total operating time during the reporting period.
- (e) Include the date of the most recent tune-up for each emission point. Include the date of the most recent burner inspection if it was not performed at the required frequency and was delayed until the next scheduled or unscheduled unit shutdown.
- (f) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(Ref.: 40 CFR 63.7550(c), Subpart DDDDD)

- 6.7 For Emission Points AF-204 and AF-205, the permittee must submit compliance reports as outlined below:
  - (a) Written reports shall be submitted to MDEQ at the following address:

Chief, Environmental Compliance and Enforcement Division Mississippi Department of Environmental Quality Office of Pollution Control P.O. Box 2261 Jackson, Mississippi 39225

(b) Electronic reports shall be submitted using CEDRI that is accessed through EPA's Central Data Exchange (CDX) at www.epa.gov/cdx.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.C(1). and 40 CFR 63.7550(h)(3), Subpart DDDDD)

6.8 If the permittee plans to use a test method, procedure, or operating condition that differs from the requirements of this permit herein, then a pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the MDEQ. If the permittee is proposing an alternative test method not previously approved by EPA, a cover letter indicating such must be attached and submitted with the test protocol.

The MDEQ shall be notified ten (10) days prior to the scheduled date(s) so that an observer may be afforded the opportunity to witness the test(s). The permittee shall submit the results of the required stack testing within sixty (60) days of the actual test for demonstrating compliance with the emission point specific limits.

6.9 For Emission Points AF-204 and AF-205, the permittee shall submit a notification of the date construction is commenced postmarked no later than 30 days after such date.

(Ref.: 40 CFR 60.7(a)(1), Subpart A)

6.10 For Emission Points AF-204 and AF-205, the permittee shall submit a notification of the date of initial startup, as provided by §60.7. This notification shall include the design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility.

(Ref.: 40 CFR 60.49b(a)(a), Subpart Db, and 40 CFR 60.7(a)(3), Subpart A)

6.11 For Emission Points AF-204 and AF-205, the permittee shall submit a notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(Ref.: 40 CFR 60.7(a)(5), Subpart A)

6.12 For Emission Points AF-204 and AF-205, the permittee shall submit the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B.

(Ref.: 40 CFR 60.49b(b), Subpart Db)

6.13 For Emission Points AF-204 and AF-205, the permittee shall submit excess emissions and monitoring systems performance reports semiannually consistent with §60.7(c), (d) and (e). Excess emissions are defined as any calculated 30-day rolling average NO<sub>x</sub> emission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b. The reporting period is each six (6) month period. All reports shall be postmarked by the 30th day following the end of the reporting period.

(Ref.: 40 CFR 60.7(c), (d), and (e), Subpart A, and 40 CFR 60.49b(h) and (w), Subpart Db)

6.14 For Emission Points AF-204 and AF-205, the permittee shall submit reports containing the data recorded in accordance with §60.49b(g). The reporting period is each six (6) month period. All reports shall be postmarked by the 30th day following the end of the reporting period.

(Ref.: 40 CFR 60.49b(g), (i), and (w), Subpart Db)

6.15 For Emission Points AF-201A and AF-201B, the permittee shall submit a notification of the closure of the emission units. The notification must include the date of the closure, a description of how the units were rendered inoperable, and a signature from a

Responsible Official or Duly Authorized Representative. Notification shall be postmarked not less than 30 days following such date.