

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Hickman Metal Recycling LLC
12360 Hickman Road
Biloxi, Mississippi
Harrison County

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: XXXXX

Permit No.: 1020-00200

Draft/Proposed

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-000	Entire Metal Recycling Facility
AA-001	1,200 HP Diesel-Fired, Compression Ignition Grinding Machine (Model Year: 1966; Displacement per cylinder: <10 Liters)

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	Facility-wide opacity limitations
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	PM (filterable only)	General nuisances
AA-001	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.4	PM (filterable only)	0.6 lbs/MMBTU/hr or as otherwise limited by facility modification restrictions
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.5	NO _x	90.0 tpy
		3.6	Hours of Operation	6,250 hours per year
		3.7		Install a non-resettable hour meter prior to start-up
	40 CFR Part 63, Subpart ZZZZ (§63.6585(a) & (c) and §63.6590(a)(1)(iii-iv))	3.8	HAPs	Applicability
	40 CFR Part 63, Subpart ZZZZ (§63.6605)	3.9		Maintain continuous compliance
	40 CFR Part 63, Subpart ZZZZ (§63.6603(a), §63.6625(h), Table 2b, Item 2 to Subpart ZZZZ, and Table 2d, Item 3 to Subpart ZZZZ)	3.10	CO	<ul style="list-style-type: none"> Limit CO concentration to 23 ppmvd or less, at 15% O₂; OR Reduce CO emissions by 70% or more
			Operating Limitations	<ul style="list-style-type: none"> Maintain pressure drop across the catalyst within 2" of water from the pressure drop measured during the performance test Maintain catalyst inlet temperature at or between 450 °F and 1350 °F
			HAPs	Minimize the engine's startup time and time at idle during startup
	40 CFR Part 63, Subpart ZZZZ (§63.6604(a)) 40 CFR Part 80 (§80.510(b))	3.11	Fuel Requirements	<ul style="list-style-type: none"> Sulfur content of 15 ppm AND Minimum cetane index of 40 OR Maximum aromatic content of 35 volume percent

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-001	40 CFR Part 63, Subpart ZZZZ (§63.6625(g))	3.12	Crankcase Emissions	<ul style="list-style-type: none"> • Install a closed crankcase ventilation system, OR • Install an open crankcase filtration emission control system.

- 3.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity. 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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.))
- 3.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.))
- 3.3 For the entire facility, the permittee shall not cause, permit, or allow the emissions of particles or contaminants in sufficient amounts or of such duration from any process or from any other source as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.))
- 3.4 For Emission Point AA-001, 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).))
- 3.5 For Emission Point AA-001, the permittee shall limit the emissions of Oxides of Nitrogen (NO_x) to no more than 90.0 tons per year for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).))
- 3.6 For Emission Point AA-001, the permittee shall limit the total number of hours in which the affected unit is operating to no more than 6,250 hours per year for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).))
- 3.7 For Emission Point AA-001, the permittee shall install a non-resettable hour meter prior to the start-up of the engine. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).))
- 3.8 Emission Point AA-001 is an existing compression ignition, stationary reciprocating internal combustion engine (RICE) with a site rating of more than 500 brake horsepower that has been re-located to an area source of Hazardous Air Pollutants (HAPs). As such, this engine is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for

Stationary Reciprocating Internal Combustion Engines. (Ref.: 40 CFR 63.6585(a) & (c) and 63.6590(a)(1)(iii-iv))

3.9 For Emission Point AA-001, the permittee shall remain in compliance with the emission limitations, operating limitations, and any other applicable requirements of Subpart ZZZZ or this permit at all times. The permittee shall operate and maintain the engine and associated air pollution control and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which 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 63.6605)

3.10 For Emission Point AA-001, the permittee shall meet the following requirements at all times, except during periods of startup:

- (a) Install an oxidation catalyst to limit the concentration of Carbon Monoxide (CO) in the engine exhaust to no more than 23 ppmvd at 15% O₂ OR reduce the CO emissions in the exhaust by 70% or more.
- (b) Maintain the catalyst such that the pressure drop across the catalyst does not change by more than 2" of water from the pressure drop measured during the most recent performance test, and
- (c) Maintain the temperature of the engine exhaust such that the inlet temperature to the catalyst is at or between 450 °F and 1350 °F.

During periods of startup, the permittee shall limit the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission limitations that apply at all times other than startup apply. (Ref.: 40 CFR 63.6603(a), 63.6625(h), Table 2b, Item 2 to Subpart ZZZZ and Table 2d, Item 3 to Subpart ZZZZ)

3.11 For Emission Point AA-001, the permittee shall use diesel fuel that meets the following requirements:

- (a) Sulfur content
 - i. 15 ppm maximum for non-road diesel fuel
- (b) Cetane index or aromatic content
 - i. A minimum cetane index of 40; or
 - ii. A maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 63.6604(a) and 80.510(b))

3.12 For Emission Point AA-001, the permittee shall either install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist,

particulates and metals. The permittee must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. (Ref.: 40 CFR 63.6625(g))

SECTION 4
WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
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SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.1	Hours of Operation	Monitor and record the number of hours in which the grinding machine is in operation
		5.2	NO _x	Keep monthly records of the amount of NO _x emitted
	40 CFR Part 63, Subpart ZZZZ (§63.6625(b))	5.3	HAPs	Install a CPMS
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). 40 CFR Part 63, Subpart ZZZZ (§63.6620(e), §63.6630(a), Table 5, Items 1 and 2 to Subpart ZZZZ)	5.4		Initial Compliance Requirements
	40 CFR Part 63, Subpart ZZZZ (§63.6615, §63.6635, §63.6640(a) and (b), Table 3, Item 4 to Subpart ZZZZ and Table 6, Item 10 to Subpart ZZZZ)	5.5		Continuous compliance requirements
	40 CFR Part 63, Subpart ZZZZ (§63.6620(a), (d), and (i); and Table 4, Items 1 and 3 to Subpart ZZZZ)	5.6		Performance test requirements
	40 CFR Part 63, Subpart ZZZZ (§63.6655(a), (b) and (d))	5.7		Recordkeeping requirements

- 5.1 For Emission Point AA-001, in order to demonstrate compliance with Condition 3.6, the permittee shall maintain daily records of the number of hours in which the grinding machine was in operation. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.2 For Emission Point AA-001, in order to demonstrate compliance with Condition 3.5, the permittee shall keep monthly records of the amount of NO_x emitted. This value shall be calculated by using the recorded number of hours during which the grinding machine was operating, required by Condition 5.1, in conjunction with an appropriate NO_x emission factor for combustion emissions from stationary diesel engines. The permittee shall keep these records, as well as the records required by Condition 5.1, on-site for a period of at least three years. These records shall be made readily available to the MDEQ upon request. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.3 For Emission Point AA-001, in order to demonstrate compliance with the catalyst inlet temperature requirements in Condition 3.10, the permittee must install, operate, and maintain a continuous parameter monitoring system (CPMS) according to the following requirements:

- (a) The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (i) through (v) below and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (a) through (e) of this condition in the site-specific monitoring plan.
 - i. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - ii. Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
 - iii. Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - iv. Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
 - v. Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).
- (b) The permittee must install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.
- (c) The CPMS must collect data at least once every 15 minutes.
- (d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (e) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
- (f) The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.

(Ref.: 40 CFR 63.6625(b))

5.4 For Emission Point AA-001, the permittee shall demonstrate initial compliance with Condition 3.10 by meeting the following requirements:

- (a) Install a CPMS to continuously monitor the catalyst inlet temperature according to the requirements in Condition 5.3.
- (b) Conduct an initial performance test according to the procedures in Condition 5.6 within 60 days of maximum production but no later than 180 days after startup.
- (c) Record the catalyst pressure drop and catalyst inlet temperature during the performance test.

- (d) If complying with the requirement to limit the concentration of CO in the exhaust emissions, demonstrate that the average CO concentration, as determined from the performance test, is less than or equal to 23 ppmvd at 15% O₂.
- (e) If complying with the requirement to reduce CO, normalize the CO concentrations to 15% O₂ on a dry basis and demonstrate that the average reduction of CO emissions is greater than or equal to 70% using the following equation:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where: Ci = concentration of CO at the control device inlet;
 Co = concentration of CO at the control device outlet; and
 R = percent reduction of CO

(Ref.: 11 Miss. Admin. Code Pt.2, R. 2.2.B(11), 40 CFR 63.6620(e), 63.6630(a), and Table 5, Items 1 and 2 to Subpart ZZZZ)

5.5 For Emission Point AA-001, the permittee shall demonstrate continuous compliance with Condition 3.10 by meeting the following requirements:

- (a) Conduct subsequent performance tests according to the procedures in Condition 5.6 every 8,760 hours of operation or three (3) years, whichever comes first, to demonstrate that the required 70% CO reduction or 23 ppmvd CO concentration limit is being achieved. If the catalyst is changed, the permittee shall conduct a performance test as soon as possible to reestablish the operating parameters (i.e. pressure drop across the catalyst) and demonstrate that the engine is still meeting the required percent reduction or CO concentration limit.
- (b) Measure the pressure drop across the catalyst once per month and demonstrate it is maintained within 2" of water from the pressure drop measured during the performance test.
- (c) Collect the catalyst inlet temperature according to Condition 5.3 and reduce the data to 4-hour rolling averages.
- (d) Maintain the 4-hour rolling temperature averages at or between 450°F and 1350°F.
- (e) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must,

however, use all the valid data collected during all other periods. (Ref.: 40 CFR 63.6615, 63.6635, 63.6640(a) and (b), Table 3, Item 4 to Subpart ZZZZ, and Table 6, Item 10 to Subpart ZZZZ)

- 5.6 For Emission Point AA-001, the permittee shall conduct performance tests according to the following procedures:
- (a) Conduct three (3) separate test runs, with each run lasting at least one (1) hour.
 - (b) Select a sampling port location and the number/location of traverse points at the inlet and outlet of the control device. (If complying with the requirement to limit the concentration of CO in the exhaust, sampling at the inlet of the control device is not required.) For CO and O₂ measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR Part 60, Appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR Part 60, Appendix A-4.
 - (c) Measure the O₂ at the inlet and outlet of the control device using Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A-2, or ASTM Method D6522-00. Measurements to determine O₂ must be made at the same time and location as the measurements for CO concentration. (If complying with the requirement to limit the concentration of CO in the exhaust, measurement at the inlet of the control device is not required.)
 - (d) Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A-3 or Method 320 of 40 CFR Part 63, Appendix A or ASTM D 6348-03. (If complying with the requirement to limit the concentration of CO in the exhaust, measurement at the inlet of the control device is not required.)
 - (e) Measure the CO at the inlet and the outlet of the control device using ASTM D6522-00 or Method 10 of 40 CFR Part 60, Appendix A-4. The CO concentration must be at 15 percent O₂, dry basis. (If complying with the requirement to limit the concentration of CO in the exhaust, measurement at the inlet of the control device is not required.)
 - (f) Determine the engine percent load by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the

performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Ref.: 40 CFR 63.6620(a), (d), & (i), and Table 4, Items 1 & 3 to Subpart ZZZZ)

5.7 For Emission Point AA-001, the permittee shall keep the following records:

- (a) Records demonstrating continuous compliance with the emission and operating limitations in Condition 3.10 according to Condition 5.5.
- (b) A copy of each notification and report that you submitted to comply with requirements of the permit, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.
- (c) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (d) Records of performance tests and performance evaluations.
- (e) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (f) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (g) Records described in §63.10(b)(2)(vi) through (xi) for the CPMS.
- (h) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (i) Requests for alternatives to the relative accuracy test for the CPMS as required in §63.8(f)(6)(i), if applicable.

(Ref.: 40 CFR 63.6655(a), (b), and (d))

SECTION 6 REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Semiannual reporting requirement
	40 CFR Part 63, Subpart ZZZZ (§63.6640(b))	6.2	Deviation reporting requirements
	40 CFR Part 63, Subpart ZZZZ (§63.6640(e) and Table 8 to Subpart ZZZZ)	6.3	
	40 CFR Part 63, Subpart ZZZZ (§63.6645(a)(2), (g), and (h)(2))	6.4	Notification requirements
	40 CFR Part 63, Subpart ZZZZ (§63.6650(a), (b), (c)(1-4), (e), and Table 7 to Subpart ZZZZ)	6.5	Reporting requirements

- 6.1 For Emission Point AA-001, the permittee shall submit semiannual reports showing the total number of hours in which the engine was in operation for each calendar month during the preceding six-month period. This report shall be submitted at the same time as the report required in Condition 6.6
- 6.2 For Emission Point AA-001, the permittee shall report each instance in which the emission or operating limitations specified by Condition 3.10 were not met. These instances are deviations from the emissions and operating limitations. These deviations must be reported according to the requirements in Condition 6.4. (Ref.: 40 CFR 63.6640(b))
- 6.3 For Emission Point AA-001, the permittee shall report each instance in which the applicable requirements in Table 8 to Subpart ZZZZ were not met. (Ref.: 40 CFR 63.6640(e) and Table 8 to Subpart ZZZZ)
- 6.4 For Emission Point AA-001, the permittee shall submit the following notifications according to the specified schedule:
- (a) All applicable notifications required by 40 CFR Part 63, Subpart A (§63.7(b) and (c), §63.8(e), (f)(4), and (f)(6), and §63.9(b)-(e), (g), and (h)), by the dates specified.
 - (b) For each required performance test, a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
 - (c) Following each required performance test, a Notification of Compliance Status before the close of business on the 60th day following the completion of the

performance test. The notification shall include the information in §63.9(h)(2)(i) and the performance test results.

(Ref.: 40 CFR 63.6645(a)(2), (g), and (h)(2))

- 6.5 For Emission Point AA-001, the permittee shall submit a semiannual compliance report covering the period beginning upon Certification of Construction and ending on June 30 or December 31, whichever date is the first date following the Certification of Construction. The compliance report must be postmarked by July 31 or January 31, whichever date follows the end of the first calendar half after the Certification of Construction. Subsequent semiannual compliance reports shall be postmarked by July 31 and January 31 and cover each semiannual reporting period from January 1 through June 30 and July 1 through December 31, respectively. The report shall contain the following information:

- (a) Company name and address;
- (b) A statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- (c) The date of the report and the beginning and ending dates of the reporting period;
- (d) If there were no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;
- (e) If there were no periods during which the CPMS was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

If a deviation from the catalyst inlet temperature range occurs, the following additional information shall also be included in the report:

- (f) The date and time that each malfunction started and stopped,
- (g) The date, time, and duration that the CPMS was inoperative, except for zero (low-level) and high-level checks.
- (h) The date, time, and duration that the CPMS was out-of-control, including the information in §63.8(c)(8).
- (i) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
- (j) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (k) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (l) A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time

of the stationary RICE at which the CPMS downtime occurred during that reporting period.

- (m) An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE.
- (n) A brief description of the stationary RICE.
- (o) A brief description of the CPMS.
- (p) The date of the latest CPMS certification or audit.
- (q) A description of any changes in CPMS, processes, or controls since the last reporting period.

If a malfunction occurred, the following additional information shall also be included in the report:

- (r) The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.
- (s) A description of actions taken to minimize emissions during a malfunction of the engine, including actions taken to correct the malfunction.

(Ref.: 40 CFR 63.6650(a), (b), (c)(1-4), (e); and Table 7 to Subpart ZZZZ)