

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT**

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Steel Dynamics Columbus, LLC
1945 Airport Road
Columbus, Mississippi
Lowndes County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and 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.

Permit Issued: _____

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires:

Permit No.: 1680-00064

TABLE OF CONTENTS

SECTION 1.	GENERAL CONDITIONS	3
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES.....	12
SECTION 3.	EMISSION LIMITATIONS & STANDARDS	16
SECTION 4.	COMPLIANCE SCHEDULE	41
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS ...	42
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS	81
SECTION 7.	TITLE VI REQUIREMENTS.....	82

APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX B LIST OF REGULATIONS REFERENCED IN THIS PERMIT

APPENDIX C COMPLIANCE ASSURANCE MONITORING PLAN

APPENDIX D METAL SCRAP MANAGEMENT PLAN

SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)
- 1.2 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 this permit.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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. 6.3.A(6)(c).)
- 1.4 (a) This permit shall be reopened and revised under any of the following circumstances:
- (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the

Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G)

- 1.5 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 permittee or, for information to be confidential, the permittee shall furnish such records to 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. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this 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. 6.3.A(5).)
- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)
 - (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the

permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

- (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)
- (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

- 1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
- 1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

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

- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

- 1.15 Nothing in this permit shall alter or affect the following:

- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
- (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
- (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and

complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2), R. 6.4.B., and R. 6.2.A(1)(c).)

1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) the changes are not modifications under any provision of Title I of the Act;
- (b) the changes do not exceed the emissions allowable under this permit;
- (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
- (d) the permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under

the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."

1.21 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.

- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

(a) Upsets

- (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.

(b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)

- (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
- (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this

regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

- (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	Specialty Integrated Steel Mini-Mill Production Facility
AA-001	<u>Scrap Handling and Process Operations</u> – The nominal throughput rates for these operations are 3,740,000 tons of scrap metal per year and 770 tons per hour. This operation was constructed in August 2007.
Meltshop Operations	
AA-002	<u>Direct Evacuation Control (DEC) System with a Canopy Hood</u> – This emission point is vented to a baghouse for controlling emissions from the South Meltshop. Both the DEC and the baghouse were constructed in August 2007.
AA-003	<u>South Electric Arc Furnace</u> – This unit has a nominal rated design capacity of 350 tons of scrap metal input per hour and was constructed in August 2007.
AA-003a	<u>South Electric Arc Furnace Lime Injection System</u> – This emission point includes two natural gas burners for the injection of lime into the liquid steel as flux. Each burner is nominally rated at 15 MMBtu/hr. This system was constructed in July 2014.
AA-004	<u>South Ladle Metallurgical Furnace (LMF)</u> – This unit has a nominal rated design capacity of 350 tons of steel input per hour and was constructed in August 2007.
AA-005a	<u>South Oxygen Blown Vacuum Tank Degasser (VTD)</u> – This emission point has a nominal rated design capacity of 263 tons of steel per hour and is equipped with a flare to control CO emissions from the unit. This unit was constructed in February 2008.
AA-005b	<u>South Vacuum Degassing Boiler</u> – This unit has a nominal heat input of 51.0 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in February 2008.
AB-002	<u>Direct Evacuation Control (DEC) System with a Canopy Hood</u> – This emission point is vented to a baghouse for controlling emissions from the North Meltshop. This emission point was constructed in June 2011.
AB-003	<u>North Electric Arc Furnace</u> – This unit has a nominal rated design capacity of 350 tons of scrap metal input per hour. The unit was constructed in June 2011.
AB-003a	<u>North Electric Arc Furnace Lime Injection System</u> – This emission point includes two natural gas burners for the injection of lime into the liquid steel as flux. Each burner is nominally rated at 15 MMBtu/hr. The nominal throughput rate for the system is 16 tons of flux per hour. This unit was constructed in July 2014.
AB-004	<u>North Ladle Metallurgical Furnace (LMF)</u> – This unit has a nominal rated design capacity of 350 tons of steel input per hour. The unit was constructed in June 2011.
AB-005a	<u>North Oxygen Blown Vacuum Tank Degasser (VTD)</u> – This emission point has a nominal rated design capacity of 263 tons of steel per hour and is equipped with a flare to control CO emissions from the unit. This unit was constructed in November 2012.
AB-005b	<u>North Vacuum Degassing Boiler</u> – This unit has a nominal heat input of 51.0 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in November 2012.
Casting Operations within the Meltshop	
AA-006	<u>Three (3) Horizontal Ladle Preheaters</u> – These units have a nominal heat input of 15.0 MMBTU per hour each. The units use low NO _x , natural gas fired burners and were constructed in August 2007.
AB-006	<u>Two (2) Horizontal Ladle Preheaters</u> – These units have a maximum heat input of 15.0 MMBTU per hour each. The units use low NO _x , natural gas fired burners. The first unit was constructed in January 2010, and the second unit was constructed in June 2011.
AA-006a	<u>One (1) Portable Ladle Dryer</u> – This unit has a nominal heat input of 15.0 MMBTU per hour. The unit uses a forced draft, natural gas fired burner and was constructed in July 2014.
AA-007	<u>One (1) Vertical Ladle Preheater</u> – This unit has a nominal heat input of 15.0 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in August 2007.

Emission Point	Description
AB-007	<u>One (1) Vertical Ladle Preheater</u> – This unit has a nominal heat input of 15.0 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in January 2010.
AA-008	<u>Line A Continuous Caster</u> – This unit has a nominally rated design capacity of 350 tons of steel input per hour and was constructed in August 2007.
AB-008	<u>Line B Continuous Caster</u> – This unit has a nominally rated design capacity of 350 tons of steel input per hour. The unit was constructed in June 2011.
AA-009	<u>One (1) Tundish Preheater</u> – This unit has a nominal heat input of 9.0 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in August 2007.
AB-009	<u>Three (3) Tundish Preheaters</u> - These units have a nominal heat input of 9.0 MMBTU per hour each (27.0 MMBTU per hour total). The units use low NO _x , natural gas fired burners. The first unit was constructed in January 2010, and the second and third units were constructed in June 2011.
AA-010	<u>Portable Tundish Safety Lining Dryer</u> – This unit has a nominal heat input of 6.0 MMBTU per hour. This unit uses a low NO _x , natural gas fired burner and was constructed in August 2007.
Hot Mill Operations	
AA-011	<u>Line A Tunnel Re-Heat Furnace</u> – This unit has a nominal heat input of 150.3 MMBTU per hour. The unit uses low NO _x , natural gas fired burners and was constructed in August 2007.
AB-011	<u>Line B Tunnel Re-Heat Furnace</u> – This unit has a nominal heat input of 103.0 MMBTU per hour. The unit uses low NO _x , natural gas fired burners and was constructed in June 2011.
Cold Mill and Acid Pickling Operations	
AA-014	<u>5-Stand Tandem Cold Mill</u> – This emission point has a nominally rated design capacity of 340 tons of rolled steel per hour and the particulate emissions are controlled with an emulsion mist separator. The emission point was constructed in August 2007.
AA-015a	<u>Hydrochloric Acid Pickling Line</u> – This emission point has a nominal design capacity of 340 tons of rolled steel per hour and emissions from this unit are controlled using a packed bed scrubber. The emission point was constructed in December 2006.
AA-015b	<u>Hydrochloric Acid Pickling Line Boiler</u> – This unit has a nominal heat input of 67.0 MMBTU per hour and uses a low NO _x , natural gas fired burner. The unit was constructed in December 2006.
AA-025	<u>Continuous Hydrochloric Acid Pickling Line Scale Breaker</u> – This unit has a nominal design rating of 340 tons of rolled steel per hour and the emissions from this unit are controlled using a baghouse. The emission point was constructed in December 2006.
AB-015a	<u>Push-Pull Hydrochloric Acid Pickling Line</u> – This emission point has a nominal design rating of 125 tons of rolled steel per hour and emissions from this unit are controlled using a packed bed scrubber. This emission point was constructed in December 2011.
AB-025	<u>Push-Pull Hydrochloric Acid Pickling Line Scale Breaker</u> – This emission point has a nominal design rating of 125 tons of rolled steel per hour and the emissions from this unit are controlled using a baghouse. This emission point was constructed in December 2011.
Galvanizing and Annealing Operations	
AA-016	<u>Annealing Furnaces</u> – This emission point consists of eleven (11) low NO _x , natural gas fired furnaces. Each furnace has a nominal heat input of 6.0 MMBTU per hour (66.0 MMBTU per hour total). The emission point was constructed in April 2007.
AB-016a	<u>Annealing Furnaces</u> – This emission point consists of five (5) low NO _x , natural gas fired furnaces. Each furnace has a nominal heat input of 6.0 MMBTU per hour (30.0 MMBTU per hour total). Two of the furnaces were constructed in June 2010, and the remaining three furnaces were constructed in January 2012.
AA-017	<u>Galvanizing Line 1</u> – This operation has a nominal capacity of 400,000 tons of rolled steel per year and 54.8 tons per hour. The emissions from this operation are controlled through the use of a mist eliminator. The operation was constructed in 2007.
AA-017a	<u>Galvanizing Line 1 Furnace</u> – This unit consists of the Preheat and Radiant Sections of the furnace. The unit has a nominal heat input of 76.2 MMBTU per hour. The Preheat Section has a direct fired burner, and the Radiant Section has a radiant tube

Emission Point	Description
	burner. The unit was constructed in 2007.
AA-017b	<u>Galvanizing Line 1 Furnace</u> – This unit consists of a direct-fired Preheat furnace. The unit has a nominal heat input of 60.83 MMBTU per hour and is equipped with low NO _x burners.
AA-017d	<u>Galvanizing Line Boiler</u> – This unit has a nominal heat input of 24.5 MMBTU per hour. The unit uses a low NO _x , natural gas fired burner and was constructed in 2007.
AB-017	<u>Galvanizing Line 2</u> - This operation has a nominal capacity of 600,000 tons of rolled steel per year and 79 tons per hour. The emissions from this operation are controlled through the use of a mist eliminator. The operation was constructed in May 2011.
AB-017a	<u>Galvanizing Line 2 Furnace</u> – This unit consists of the Preheat and Radiant Sections of the furnace. The unit has a nominal heat input of 70.4 MMBTU per hour. The Preheat Section has a direct fired burner, and the Radiant Section has a radiant tube burner. The unit was constructed in May 2011.
AC-017	<u>Galvanizing Line 3</u> - This operation has a nominal capacity of 400,000 tons of rolled steel per year and 102 tons per hour. The emissions from the cleaning section are controlled through the use of a mist eliminator.
AC-017a	<u>Galvanizing Line 3 Radiant Tube Furnace</u> – This unit consists of a Radiant Tube furnace with a nominal heat input of 10.34 MMBTU per hour and is equipped with low-NO _x burners.
AC-017b	<u>Galvanizing Line 3 Direct-Fired Furnace with Waste Heat Recovery Boiler</u> – This unit consists of a direct-fired Preheat furnace with a nominal heat input of 70.63 MMBTU per hour and is equipped with low-NO _x burners. Exhaust from the furnace is used by a 20 MMBTU per hour Waste Heat Recovery Boiler.
AC-017c	<u>Galvanizing Line 3 Cleaning Section Dryer</u> – This unit consists of a direct-fired dryer with a nominal heat input of 1.94 MMBTU per hour and is equipped with low-NO _x burners.
Coil Coating Operations	
AA-030a	<u>Curing Oven</u> – A curing oven equipped with natural gas-fired burners with a nominal heat input of 20 MMBtu/hr. AA-030a is equipped with a closed vent system that is routed to the thermal oxidizer (AA-030b) for VOC/HAP emission control.
AA-030b	<u>Thermal Oxidizer</u> – A natural gas-fired Recuperative Thermal Oxidizer to control VOC/HAP emissions originating from the Coating Line. The unit operates with a nominal heat input of 77 MMBtu/hr.
AA-030c	<u>Continuous Roll Coating Machine</u> – A roll coating machine used to apply various primers and topcoats, with varying VOC/HAP contents, to metal coils. AA-030c is also equipped with a closed vent system that is routed to the thermal oxidizer (AA-030b) for emission control.
AA-030d	<u>Primer and Topcoat Mixing Area</u> – Emissions from this area originate from the volatilization of VOC/HAPs that occur when mixing coatings prior to application. AA-030d is also equipped with a closed vent system that is routed to the thermal oxidizer (AA-030b) for emission control.
Emergency Generators	
AA-022a	<u>Emergency Generator “G100-2”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 2220 HP (1500 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in November 2006.
AA-022b	<u>Emergency Generator “G100-3”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 2220 HP (1500 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in November 2006.
AA-022c	<u>Emergency Generator “G500-1”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 2220 HP (1500 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in October 2006.
AA-022d	<u>Emergency Generator “G500-6”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 2220 HP (1500 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in October 2006.
AA-022e	<u>Emergency Generator “G100-1-LC2”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 755 HP (500 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in August 2008.

Emission Point	Description
AA-022f	<u>Emergency Generator “G100-8”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 2922 HP (2000 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in December 2010.
AA-022g	<u>Emergency Generator “CY Gen”</u> – This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 145 HP (80 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in January 2012.
AA-022h	<u>Emergency Generator “G300-1-LC3”</u> - This unit is a diesel fired, compression ignition emergency generator with a nominally rated power of 470 HP (300 kW). The engine has a displacement per cylinder of <10 liters and was manufactured and constructed in March 2012.
AA-022i	<u>Emergency Generator “AdminGen”</u> - This unit is a propane fired, 4-stroke, lean burn (4SLB) spark ignition emergency generator with a nominally rated power of 97.7 HP (60 kW). The engine was manufactured and constructed in April 2014.
Other Plant-Wide Operations and Activities	
AA-018	<u>Slag Processing and Mill Scale Handling Operations</u> – This operation has a nominal throughput rate of 584,800 tons of slag and mill scale per year. The operation was constructed in August 2007.
AA-019	<u>Cooling Towers</u> – Two of the cooling towers are considered significant sources of emissions for initial permitting purposes. The nominal capacity of these two towers is 7.2 million gallons of recirculated water per hour. These towers were constructed in December 2004. All other cooling towers on-site are insignificant sources of emissions.
AA-020	<u>Storage Silos</u> – This emission point consists of two (2) EAF dust silos and seven (7) material storage silos and weight hoppers with six (6) bin vents nominally rated at 500 dcsfm. All other material storage on-site is an insignificant source of emissions.
AA-021	<u>Plant-Wide Fugitive Emissions from Roadways</u>
AA-023	<u>Dust Handling and Transfer Operations</u>
AA-024	<u>Facility-Wide Insignificant Activities</u>
AA-026	<u>Twelve (12) 20,000 Gallon Hydrochloric Acid Storage Tanks</u> – These tanks are each 20,000-gallon fixed roof tanks whose emissions are controlled by scrubbers.
AA-027	<u>Hydrogen Plant Waste Heat Boiler</u> - This emission point is owned and operated by H2G and has a nominally rated design capacity of 7 MMBTU per hour.
AA-028	<u>On-Site Supplier Operations</u>
AA-029	<u>Autothermal Reformer (ATR)</u> - This emission point is owned and operated by H2G and is projected to produce an additional 12,000 scfh of hydrogen gas for the facility.

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.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 subject to the exceptions provided in (a) & (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 percent 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.)

3.A.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.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-000 (Except for AA-030 and AC-017)	PSD Construction Permit Issued August 27, 2007	3.B.1	Steel	3,400,000 tpy
		3.B.2	NO _x	1,166.0 tpy
		3.B.3	CO	3,913.2 tpy
		3.B.4	SO ₂	487.6 tpy
		3.B.5	VOCs	259.0 tpy
		3.B.6	PM	350.2 tpy
		3.B.7	PM ₁₀	286.2 tpy
		3.B.8	Opacity	10%
AA-000	PSD Construction Permit Issued August 27, 2007 and Air Construction Permit Issued January 22, 2016	3.B.9	HAPs	9.90 tpy Individual and 24.90 tpy Combined
AA-002 and AB-002	PSD Construction Permit Issued March 31, 2005 (AA-002) and August 27, 2007 (AB-002)	3.B.10	PM ₁₀ (filterable only)	BACT: 0.0018 gr/dscf exiting Baghouse
		3.B.11	Lead	BACT: • 0.000871 lb/ton of steel produced • 0.305 lbs/hr and 0.74 tpy
		3.B.12	Opacity	BACT for Fugitive Emissions is the use of Roof Monitors and compliance with the applicable requirements of 40 CFR 60, Subpart AAa.
	40 CFR Part 60, Subpart AAa (§60.272a(1))	3.B.13	PM ₁₀ (filterable only)	• Applicability • 0.0052 gr/dscf exiting Baghouse (<i>the permittee shall comply with Condition 3.B.10 since it is more stringent</i>)
	40 CFR Part 60, Subpart AAa (§60.272a(2))	3.B.14	Opacity	3% exiting Baghouse
	40 CFR Part 60, Subpart AAa (§60.272a(3))	3.B.15	Opacity	6% exiting Roof-Vents/Meltshop

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-003 and AB-003	PSD Construction Permit Issued March 31, 2005 (AA-003) and August 27, 2007 (AB-003)	3.B.16	NO _x	BACT: <ul style="list-style-type: none"> 0.35 lb/ton of Steel Produced 122.5 lbs/hr and 297.5 tpy for each EAF
		3.B.17	CO	BACT: <ul style="list-style-type: none"> 2.0 lb/ton of Steel Produced 700.0 lbs/hr and 1700 tpy for each EAF Use of DEC System
		3.B.18	SO ₂	BACT: <ul style="list-style-type: none"> Use of Low Sulfur Scrap 0.2 lb/ton of Steel Produced 70 lbs/hr and 170 tpy for each EAF
		3.B.19	VOCs	BACT: <ul style="list-style-type: none"> 0.13 lb/ton of Steel Produced 45.5 lbs/hr and 110.5 tpy for each EAF Use of Scrap Management Plan
AA-004 and AB-004	PSD Construction Permit Issued March 31, 2005 (AA-004) and August 27, 2007 (AB-004)	3.B.20	NO _x	BACT: <ul style="list-style-type: none"> 0.02 lb/ton of Steel Produced 6.93 lbs/hr and 16.83 tpy
		3.B.21	CO	BACT: <ul style="list-style-type: none"> 0.05 lb/ton of Steel Produced 17.325 lbs/hr and 42.075 tpy
		3.B.22	SO ₂	BACT: <ul style="list-style-type: none"> 0.08 lb/ton of Steel Produced 27.72 lbs/hr and 67.32 tpy for each LMF
		3.B.23	VOCs	BACT: <ul style="list-style-type: none"> 0.005 lb/ton of Steel Produced 1.7325 lbs/hr and 4.2075 tpy for each LMF
AA-005a and AB-005a	PSD Construction Permit Issued March 31, 2005 (AA-005a), August 27, 2007 (AB-005a)	3.B.24	CO	BACT: 7.32 lb/heat and 10.95 tons/year for each flare.
AA-005b, AA-015b, AA-017d, and AB-005b	PSD Construction Permit Issued March 31, 2005 (AA-005b AA-015b, AA-017d) and August 27, 2007 (AB-005b)	3.B.25	NO _x	BACT: <ul style="list-style-type: none"> 0.08 lb/MMBTU Combustion of Natural Gas Only Use of Low NO_x Burner AA-005b and AB-005b: 4.08 lbs/hr each AA-015b: 5.36 lbs/hr AA-017d: 1.96 lbs/hr

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-005b, AA-015b, AA-017d, and AB-005b	PSD Construction Permit Issued March 31, 2005 (AA-005b AA-015b, AA-017d) and August 27, 2007 (AB-005b)	3.B.26	CO	BACT: <ul style="list-style-type: none"> 0.084 lb/MMBTU Combustion of Natural Gas Only Use of Low NOx Burners AA-005b and AB-005b: 4.28 lbs/hr each AA-015b: 5.63 lbs/hr AA-017d: 2.06 lbs/hr
		3.B.27	VOCs	BACT: Combustion of Natural Gas Only
		3.B.28	SO ₂	
		3.B.29	PM ₁₀	
	40 CFR Part 60, Subparts Dc and A (§60.40c and §60.1)	3.B.30	Applicability	<ul style="list-style-type: none"> Applicability Limited Requirements due to natural gas combustion only.
AA-006, AA-007, AA-009, AA-010, AA-016, AB-006, AB-007, AB-009, and AB-016a	PSD Construction Permit Issued March 31, 2005 (AA-006, AA-007, AA-009, AA-010, AA-016) and August 27, 2007 (AB-006, AB-007, AB-009, AB-016a)	3.B.31	NO _x	BACT: <ul style="list-style-type: none"> 0.1 lb/MMBTU Combustion of Natural Gas Only AA-006: 4.5 lbs/hr AB-006: 3.0 lbs/hr AA-007 and AB-007: 1.5 lbs/hr each AA-009: 0.9 lbs/hr AB-009: 2.7 lbs/hr AA-010: 0.6 lbs/hr AA-016: 6.6 lbs/hr AB-016a: 3.0 lbs/hr
		3.B.26	CO	BACT: <ul style="list-style-type: none"> 0.084 lb/MMBTU Combustion of Natural Gas Only AA-006: 3.78 lbs/hr AB-006: 2.52 lbs/hr AA-007 and AB-007: 1.26 lbs/hr each AA-009: 0.76 lbs/hr AB-009: 2.27 lbs/hr AA-010: 0.50 lbs/hr AA-016: 5.544 lbs/hr AB-016a: 2.52 lbs/hr
		3.B.28	SO ₂	BACT: Combustion of Natural Gas Only
		3.B.29	PM ₁₀	
		3.B.27	VOCs	
AA-011 and AB-011	PSD Construction Permit Issued March 31, 2005 (AA-011) and August 27, 2007 (AB-011)	3.B.31	NO _x	BACT: <ul style="list-style-type: none"> 0.1 lb/MMBTU Combustion of Natural Gas Only Low NOx Burners AA-011: 15.03 lbs/hr AB-011: 10.3 lb/hr

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-011 and AB-011	PSD Construction Permit Issued March 31, 2005 (AA-011) and August 27, 2007 (AB-011)	3.B.32	CO	BACT: <ul style="list-style-type: none"> 0.066 lb/MMBTU Combustion of Natural Gas Only Use of Low NOx Burners with Good Combustion Practices AA-011: 9.92 lbs/hr AB-011: 6.8 lb/hr
		3.B.28	SO ₂	BACT: Combustion of Natural Gas Only
		3.B.29	PM ₁₀	
		3.B.33	VOCs	BACT: <ul style="list-style-type: none"> 0.006 lb/MMBTU Combustion of Natural Gas Only Use of Low NOx Burners with Good Combustion Practices AA-011: 0.9 lbs/hr AB-011: 0.62 lb/hr
		3.B.34	H ₂ SO ₄	Combustion of Natural Gas
AA-014	PSD Construction Permit Issued March 31, 2005	3.B.35	PM ₁₀	Application of a Mist Eliminator
AA-015a and AB-015a	PSD Construction Permit Issued March 31, 2005 (AA-015a) and August 27, 2007 (AB-015a)	3.B.36	PM ₁₀	BACT: Wet Scrubber followed by Mist Eliminator.
		3.B.37	HCl	BACT: <ul style="list-style-type: none"> Wet Scrubber followed by Mist Eliminator. 18 ppmv
AA-017a and AB-017a	PSD Construction Permit Issued March 31, 2005 (AA-015b) and August 27, 2007	3.B.38	NO _x	BACT: <ul style="list-style-type: none"> 0.15 lb/MMBTU heat input Combustion of Natural Gas Only Low NOx Burners AA-017a: 11.43 lbs/hr AB-017a: 10.56 lbs/hr
AA-017a and AB-017a	PSD Construction Permit Issued March 31, 2005 (AA-015b) and August 27, 2007	3.B.26	CO	BACT: <ul style="list-style-type: none"> 0.084 lb/MMBTU heat input Combustion of Natural Gas Only Low NOx Burners AA-017a: 6.4 lbs/hr AB-017a: 5.91 lbs/hr
		3.B.28	SO ₂	BACT: Combustion of Natural Gas Only
		3.B.29	PM ₁₀	
		3.B.27	VOCs	
AA-018	PSD Construction Permit Issued March 31, 2005	3.B.39	PM/PM ₁₀	BACT for Fugitive Emissions is limiting the drop heights and the application of water

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-019	PSD Construction Permit Issued March 31, 2005	3.B.40	PM/PM ₁₀	BACT: Application of a Drift Eliminator
AA-020	PSD Construction Permit Issued March 31, 2005	3.B.41	PM/PM ₁₀	BACT: 0.01 gr/dscf utilizing bin vent filters
AA-021	PSD Construction Permit Issued March 31, 2005	3.B.42	PM/PM ₁₀	BACT: Use of Wetting Agents
AA-023	40 CFR Part 60, Subpart AAa (§60.272a)	3.B.43	Opacity	10% from the Dust Handling/Transfer Operations
AA-002, AA-003, AA-023, AB-002, and AB-003	40 CFR 60, Subpart AAa and A (§60.270a and §60.1)	3.B.44	Applicable	Applicability
AA-022a, AA-022b, AA-022c, AA-022d, AA-022e, AA-022f, AA-022g, and AA-022h	• 40 CFR Part 63, Subpart ZZZZ (§63.6590(c)(1)) • 40 CFR Part 60, Subpart IIII (§60.4200(a))	3.B.45	Exhaust Emissions	Applicability
	• 40 CFR Part 60, Subpart IIII (§60.4205(a)) • Title V Permit to Operate Issued May 20, 2010	3.B.46		Emission Standard Certification
	• 40 CFR Part 60, Subpart IIII (§60.4206) • Title V Permit to Operate Issued May 20, 2010	3.B.47		Lifetime Emission Standard
AA-022a, AA-022b, AA-022c, AA-022d, AA-022e, AA-022f, AA-022g, and AA-022h	• 40 CFR Part 60, Subpart IIII (§60.4207(a), (b), and (c)) • Title V Permit to Operate Issued May 20, 2010	3.B.48	Exhaust Emissions	Diesel Fuel Standard
	• 40 CFR Part 60, Subpart IIII (§60.4208(a) and (h)) • Title V Permit to Operate Issued May 20, 2010	3.B.49		Installation Deadlines
	• 40 CFR Part 60, Subpart IIII (§60.4217) • Title V Permit to Operate Issued May 20, 2010	3.B.50		Special Fuels/ Optional Standards
AA-022i	• 40 CFR Part 63, Subpart ZZZZ (§63.6590(c)(1)) • 40 CFR Part 60, Subpart JJJJ (§60.4230(a)(4)(iv))	3.B.51	Exhaust Emissions	Applicability

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-022i	• 40 CFR Part 60, Subpart JJJJ (§60.4243(d))	3.B.52	Exhaust Emissions	Emergency Engine Definition
	• 40 CFR Part 60, Subpart JJJJ (§60.4233(d)) • Table 1 to Subpart JJJJ of Part 60 • 40 CFR Part 60, Subpart JJJJ (§60.4234)	3.B.53		Emissions Standards: • NO _x + HC: 10 g/HP-hr • CO: 387 g/HP-hr
AA-003 and AB-003	• 40 CFR Part 63, Subpart YYYYYY (§63.10680 and §63.10690(a)) • Title V Permit to Operate Issued May 20, 2010	3.B.54	Applicability	Subpart YYYYYY - NESHAP for Area Sources: Electric Arc Furnace Steelmaking Facilities
	40 CFR Part 63, Subpart YYYYYY (§63.10686(b)(1))	3.B.55	PM ₁₀ (filterable only)	0.0052 gr/dscf exiting Baghouse (<i>the permittee shall comply with Condition 3.B.10 since it is more stringent</i>)
	• 40 CFR Part 63, Subpart YYYYYY (§63.10686(b)(2)) • Title V Permit to Operate Issued May 20, 2010	3.B.56	Opacity	6% exiting Roof-Vents/Meltshop
AA-002, AB-002, AA-005a, and AB-005b	40 CFR Part 64 (§64.2(a))	3.B.57	CAM	Applicability
AA-003a, AB-003a, and AA-006a	Permit to Construct issued May 1, 2014	3.B.58	Opacity	10% as determined by EPA Test Method 9
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.59	PM/PM ₁₀ (filterable only)	$E = 0.8808 \cdot I^{-0.1667}$
	Permit to Construct issued May 1, 2014	3.B.60	SO ₂	Combustion of Natural Gas
AA-030a and AA-030b	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.61	PM/PM ₁₀ (filterable only)	$E = 0.8808 \cdot I^{-0.1667}$
AA-030a, AA-030b, AA-030c, and AA-030d	11 Miss. Admin. Code Pt. 2, R. 1.3.A(1)-(3), and R. 1.3.B.	3.B.62	Opacity	40% Opacity
		3.B.63		
	40 CFR Part 60, Subpart TT (§60.460)	3.B.64	VOC	Applicability

Emission Point	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard
AA-030a, AA-030b, AA-030c, and AA-030d	Permit to Construct issued January 22, 2016	3.B.65	VOC	39.0 tpy
	40 CFR 60, Subpart TT (§60.462(a)(3))	3.B.66		10 percent of VOC's applied (90 percent emission reduction) <i>Note: Condition 3.B.67 requires a 99 percent VOC emission reduction.</i>
	Permit to Construct issued January 22, 2016	3.B.67		No more than 1 percent of the VOC mixed or applied (99 percent emission reduction)
		3.B.68		100 percent capture efficiency for closed vent system
		3.B.69		Establish compliance operating parameters and limits
		3.B.70		Continuous control of Coating Line
AA-017b, AC-017a, and AC-017b	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.71	PM/PM ₁₀ (filterable only)	$E = 0.8808 \cdot I^{-0.1667}$
AA-017b, AC-017a, AC-017b, and AC-017c	11 Miss. Admin. Code Pt. 2, R. 1.3.A(1)-(3)	3.B.72	Opacity	40% Opacity
AC-017	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.B.73	Opacity	40% Opacity
AA-017a and AA-017b	11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Permit to Operate modified [DATE]	3.B.74	NO _x	42.64 tpy (combined emissions)
AC-017a	11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Permit to Operate modified [DATE]	3.B.75	Natural Gas Usage	79 MMSCF/year (12-month rolling total)
AC-017b	11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Permit to Operate modified [DATE]	3.B.76	Natural Gas Usage	534 MMSCF/year (12-month rolling total)
	40 CFR Part 60, Subpart Dc (§60.40c)	3.B.77	Applicability	<ul style="list-style-type: none"> • Applicability • Limited Requirements due to natural gas combustion only.
AC-017c	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.78	PM	0.6 lbs/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Permit to Operate modified [DATE]	3.B.79	Natural Gas Usage	15 MMSCF/year (12-month rolling total)
AC-017	11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Permit to Operate modified [DATE]	3.B.80	PM/PM ₁₀	Application of a Mist Eliminator
AA-029	Title V Permit to Operate modified [DATE]	3.B.81	Hours	≤2,000 hours per year bypassing AA-027 and venting directly to the atmosphere

- 3.B.1 For the Entire Facility, except for Emission Points AA-030 and AC-017, the permittee shall limit the annual steel production to no more than 3,400,000 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.2 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit Nitrogen Oxides (NO_x) emissions to no more than 1,166.0 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.3 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit Carbon Monoxide (CO) emissions to no more than 3,913.2 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.4 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit Sulfur Dioxide (SO₂) emissions to no more than 487.6 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.5 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit Volatile Organic Compound (VOC) emissions to no more than 259.0 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.6 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit Particulate Matter (PM) emissions to no more than 350.2 tons per year as determines for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.7 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), the permittee shall limit the emissions of Particulate Matter with a diameter of 10 microns (PM₁₀) to no more than 286.2 tons per year as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.8 For the Entire Facility, except for Emission Points AA-030 and AC-017 (including AC-017, AC-017a, AC-017b, and AC-017c), except as otherwise specified or limited herein, the permittee shall limit Opacity from any emission source to no more than 10% at any time as determined by EPA Reference Method 9. (Ref.: PSD Construction Permit Issued August 27, 2007)
- 3.B.9 For the Entire Facility, the permittee shall limit Hazardous Air Pollutants (HAPs) to no more than 9.90 tons per year for each individual HAP and no more than 24.90 tons per year for all combined HAPs, as determined for each consecutive 12-month period on a rolling basis. (Ref.: PSD Construction Permit Issued August 27, 2007 and Air)

Construction Permit Issued January 22, 2016)

- 3.B.10 For Emission Point AA-002 and AB-002, the permittee shall limit emissions of PM₁₀ (filterable only) to no more than 0.0018 grains per dry standard cubic feet utilizing the Direct Evacuation Control System and Fabric Filter Baghouse (BACT for PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.11 For Emission Point AA-002 and AB-002, the permittee shall limit the total emissions of Lead from each Direct Evacuation Control System with Fabric Filter Baghouse to no more than 0.000871 pounds per ton of steel produced, 0.305 pounds per hour, and 0.74 tons per year as determined for each consecutive 12-month period on a rolling basis. (BACT for Lead). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.12 For Emission Point AA-002 and AB-002, the permittee shall limit Fugitive Emission by the use of Roof Monitors and compliance with the applicable requirements of 40 CFR 60, Subpart AAa (BACT for Fugitive Emissions). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.13 For Emission Point AA-002 and AB-002, the permittee is subject to and shall comply with the applicable requirements of 40 CFR Part 60, Subpart AAa - Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983. The permittee shall demonstrate compliance with the Particulate Matter Limitation of 0.0052 gr/dscf by achieving compliance with the BACT Emission Limitation of 0.0018 gr/dscf, which is more stringent. (Ref.: 40 CFR 60.270a and 40 CFR 60.272a(a)(1))
- 3.B.14 For Emission Point AA-002 and AB-002, the permittee shall limit the Opacity to no more than 3% at any time utilizing the Direct Evacuation Control System and Fabric Filter Baghouse. (Ref.: 40 CFR 60.272a(2))
- 3.B.15 For Emission Point AA-002 and AB-002, the permittee shall limit the Opacity to no more than 6% at any time exiting the Roof-Vents/Meltshop. (Ref.: 40 CFR 60.272a(3))
- 3.B.16 For Emission Points AA-003 and AB-003, the permittee shall limit the total emissions of NO_x from each EAF to no more than 0.35 pounds per ton of Steel Produced, 122.5 pounds per hour, and 297.5 tons per year as determined for each consecutive 12-month period on a rolling basis, utilizing the DEC System. (BACT for NO_x is Use of the DEC System). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.17 For Emission Point AA-003 and AB-003, the permittee shall limit the total emissions of CO from each EAF to no more than 2.0 pound per ton of Steel Produced, 700.0 pounds per hour, 1700 tons per year as determined for each consecutive 12-month period on a rolling basis, utilizing the DEC System (BACT for CO). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.18 For Emission Points AA-003 and AB-003, the permittee shall limit the total emissions of SO₂ from each EAF to no more than 0.2 pounds per ton of Steel Produced, 70.0 pounds per hour, 170.0 tons per year as determined for each consecutive 12-month period on a rolling basis, and Use Low Sulfur Scrap (BACT for SO₂). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 3.B.19 For Emission Points AA-003 and AB-003, the permittee shall limit the total emissions of VOCs from each EAF to no more than 0.13 pounds per ton of Steel Produced, 45.5 pounds per hour, and 110.5 tons per year as determined for each consecutive 12-month period on a rolling basis, and develop and implement a Scrap Management Plan. (BACT for VOCs). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.20 For Emissions Points AA-004 and AB-004, the permittee shall limit the total emissions of NO_x from each LMF to no more than 0.02 pounds per ton of Steel Produced, 6.93 pounds per hour, and 16.83 tons per year as determined for each consecutive 12-month period on a rolling basis. (BACT for NO_x). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.21 For Emission Points AA-004 and AB-004, the permittee shall limit the total emissions of CO from each LMF to no more than 0.05 pound per ton of Steel Produced and 17.325 pounds per hour, and 42.075 tons per year as determined for each consecutive 12-month period on a rolling basis. (BACT for CO). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.22 For Emission Points AA-004 and AB-004, the permittee shall limit the total emissions of SO₂ from each LMF to no more than 0.08 pound per ton of Steel Produced, 27.72 pounds per hour, and 67.32 tons per year as determined for each consecutive 12-month period on a rolling basis (BACT for SO₂). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.23 For Emission Points AA-004 and AB-004, the permittee shall limit the total emissions of VOCs from each LMF to no more than 0.005 pound per ton of Steel Produced and 1.7325 pounds per hour, and 4.2075 tons per year as determined for each consecutive 12-month period on a rolling basis (BACT for VOCs). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.24 For Emission Point AA-005a and AB-005a, the permittee shall limit emissions of CO from each flare to no more than 7.32 pounds per heat and 10.95 tons per year as determined for each consecutive 12-month period on a rolling basis (BACT for CO). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.25 For Emission Points AA-005b, AA-015b, AA-017d, and AB-005b, the permittee shall limit emission of NO_x to no more than 0.08 pound per Million British Thermal Units (lb/MMBTU) heat input, combust Natural Gas only and utilize low NO_x burners.
- For Emission Points AA-005b and AB-005b, the permittee shall limit emissions of NO_x from each boiler to no more than 4.08 pounds per hour.
 - For Emission Point AA-015b, the permittee shall limit emissions of NO_x from the boiler to no more than 5.36 pounds per hour.
 - For Emission Point AA-017d, the permittee shall limit emissions of NO_x from the boiler to no more than 1.96 pounds per hour (BACT for NO_x). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.26 For Emission Points AA-005b, AA-006, AA-007, AA-009, AA-010, AA-015b, AA-016, AA-017a, AA-017d, AB-005b, AB-006, AB-007, AB-009, AB-016a, AB-017a,

and AB-017b, the permittee shall limit emissions of CO to no more than 0.084 lb/MMBTU heat input, combust Natural Gas only, and utilize low NO_x burners.

- For Emission Points AA-005b and AB-005b, the permittee shall limit emissions of CO from each boiler to no more than 4.28 pounds per hour.
- For Emission Point AA-006, the permittee shall limit emissions of CO to no more than 3.78 pounds per hour.
- For Emission Points AB-006, the permittee shall limit emission of CO from each unit to no more than 2.52 pounds per hour.
- For Emission Points AA-007 and AB-007, the permittee shall limit emissions of CO from each unit to no more than 1.26 pounds per hour.
- For Emission Point AA-009, the permittee shall limit emissions of CO from each unit to no more than 0.76 pounds per hour.
- For Emission Point AB-009, the permittee shall limit the emissions of CO to no more than 2.27 pounds per hour.
- For Emission Point AA-010, the permittee shall limit the emissions of CO to no more than 0.5 pounds per hour.
- For Emission Point AA-015b, the permittee shall limit emissions of CO from the boiler to no more than 5.63 pounds per hour.
- For Emission Point AA-016, the permittee shall limit emissions of CO to no more than 5.54 pounds per hour.
- For Emission Point AB-016a, the permittee shall limit emissions of CO to no more than 2.52 pounds per hour.
- For Emission Point AA-017a, the permittee shall limit emissions of CO to no more than 6.4 pounds per hour.
- For Emission Point AB-017a, the permittee shall limit the emissions of CO to no more than 5.91 pounds per hour.
- For Emission Point AA-017d, the permittee shall limit emissions of CO from the boiler to no more than 2.06 pounds per hour. (BACT for CO).

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 3.B.27 For Emission Points AA-005b, AA-006, AA-007, AA-009, AA-010, AA-015b, AA-016, AA-017a, AA-017d, AB-005b, AB-006, AB-007, AB-009, AB-016a, and AB-017a, the permittee shall limit emissions of VOCs by combusting Natural Gas only. (BACT for VOCs is Combustion of Natural Gas Only) (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.28 For Emission Points AA-005b, AA-006, AA-007, AA-009, AA-010, AA-011, AA-015b, AA-016, AA-017a, AA-017d, AB-005b, AB-006, AB-007, AB-009, AB-011, AB-012, AB-016a, and AB-017a, the permittee shall limit emissions of SO₂ by combusting Natural Gas only (BACT for SO₂). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 3.B.29 For Emission Points AA-005b, AA-006, AA-007, AA-009, AA-010, AA-011, AA-015b, AA-016, AA-017a, AA-017d, AB-005b, AB-006, AB-007, AB-009, AB-011, AB-016a, and AB-017a, the permittee shall limit emissions PM₁₀ by combusting Natural Gas only (BACT for PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.30 For Emission Points AA-005b, AA-015b, AA-017d, and AB-005b, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial Commercial Steam Generating Units and Subpart A - General Provisions. The permittee shall demonstrate compliance with any Emission Limitation, Performance Testing, and Monitoring requirements of Subpart Dc by combusting Natural Gas only (BACT Limitations for SO₂ and PM). (Ref.: 40 CFR 60.40c(a))
- 3.B.31 For Emission Points AA-006, AA-007, AA-009, AA-010, AA-011, AA-016, AB-006, AB-007, AB-009, AB-011, and AB-016a, the permittee shall limit emissions of NO_x to no more than 0.1 lb/MMBTU heat input, combust Natural Gas only and utilize low NO_x burners.
- For Emission Point AA-006, the permittee shall limit emissions of NO_x to no more than 4.5 pounds per hour.
 - For Emission Point AB-006, the permittee shall limit emissions of NO_x from each unit to no more than 3.0 pounds per hour.
 - For Emission Points AA-007 and AB-007, the permittee shall limit emissions of NO_x from each unit to no more than 1.5 pounds per hour.
 - For Emission Point AA-009, the permittee shall limit the emissions of NO_x to no more than 0.9 pounds per hour.
 - For Emission Point AB-009, the permittee shall limit the emissions of NO_x to no more than 2.7 pounds per hour.
 - For Emission Point AA-010, the permittee shall limit the emissions of NO_x to no more than 0.6 pounds per hour.
 - For Emission Point AA-011, the permittee shall limit emissions of NO_x to no more than 15.03 pounds per hour.
 - For Emission Point AB-011, the permittee shall limit emissions of NO_x to no more than 10.3 pounds per hour.
 - For Emission Point AA-016, the permittee shall limit emissions of NO_x to no more than 6.6 pounds per hour.
 - For Emission Point AB-016a, the permittee shall limit emissions of NO_x to no more than 3.0 pounds per hour. (BACT for NO_x)
- (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 3.B.32 For Emission Points AA-011 and AB-011, the permittee shall limit emissions of CO to no more than 0.066 lb/MMBTU heat input, combust Natural Gas only, and utilize low NO_x burners.

- For Emission Point AA-011, the permittee shall limit emissions of CO to no more than 9.92 pounds per hour.
- For Emission Point AB-011, the permittee shall limit emissions of CO to no more than 6.8 pounds per hour. (BACT for CO).

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.33 For Emission Points AA-011 and AB-011, the permittee shall limit emissions of VOCs to no more than 0.006 lb/MMBTU heat input, combust Natural Gas only, and utilize low NOx burners.

- For Emission Point AA-011, the permittee shall limit emissions of VOCs to no more than 0.90 pounds per hour.
- For Emission Point AB-011, the permittee shall limit emissions of VOCs to no more than 0.62 pounds per hour. (BACT for VOCs).

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.34 For Emission Points AA-011 and AB-011, the permittee shall limit emissions of Sulfuric Acid Mist by combusting Natural Gas only. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.35 For Emission Point AA-014, the permittee shall limit emissions of PM₁₀ by utilizing a Mist Eliminator. (Ref.: PSD Construction Permit Issued March 31, 2005)

3.B.36 For Emission Point AA-015a, the permittee shall limit emissions of PM₁₀ by utilizing a Wet Scrubber followed by a Mist Eliminator (BACT for PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.37 For Emission Point AA-015a and AB-015a, the permittee shall limit emission of Hydrochloric Acid Mist to 18 ppmv utilizing a Wet Scrubber followed by a Mist Eliminator. (BACT for HCl is the Use of a Wet Scrubber followed by a Mist Eliminator) (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.38 For Emission Points AA-017a and AB-017a, the permittee shall limit emissions of NO_x to no more than 0.15 lb/MMTU heat input, combust Natural Gas only, and utilize low NOx burners.

- For Emission Point AA-017a, the permittee shall limit emissions of NO_x to no more than 11.43 pounds per hour.
- For Emission Point AB-017a, the permittee shall limit the emissions of NO_x to no more than 10.56 pound per hour. (BACT for NO_x).

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

3.B.39 For Emission Point AA-018, the permittee shall limit Fugitive Emissions of PM /PM₁₀ by limiting the drop heights and by utilizing the application of water for dust control. (BACT for PM/PM₁₀) (Ref.: PSD Construction Permit Issued March 31, 2005)

3.B.40 For Emission Point AA-019, the permittee shall limit emissions of PM/PM₁₀ by Application of a Drift Eliminator (BACT for PM/PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005)

- 3.B.41 For Emission Point AA-020, the permittee shall limit emissions of PM/PM₁₀ to no more than 0.01 grains per dry standard cubic foot utilizing bin vent filters (BACT for PM/PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005)
- 3.B.42 For Emission Point AA-021, the permittee shall limit PM by use of Wetting Agents (BACT for PM/PM₁₀). (Ref.: PSD Construction Permit Issued March 31, 2005)
- 3.B.43 For Emission Point AA-023, the permittee shall limit Opacity to 10% at any time as determined by 40 CFR Part 60, Subpart AAa. (Ref.: 40 CFR 60.272a)
- 3.B.44 For Emission Point AA-002, AA-003, AA-023, AB-002, and AB-003, the permittee is subject to the applicable standards of 40 CFR Part 60, Subpart AAa-Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983 and Subpart A – General Provisions. (Ref.: 40 CFR 60.270a)
- 3.B.45 Emission Points AA-022a through AA-022h are subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ.
- Emission Points AA-022a through AA-022h are new, compression ignition (CI) emergency stationary RICE located at an area source of HAP emissions. As such, these emission points shall comply with 40 CFR Part 63, Subpart ZZZZ by remaining in compliance with all applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII. (Ref.: 40 CFR 63.6590(c)(1) and §60.4200(a))
- 3.B.46 For Emission Points AA-022a through AA-022h, if the permittee operates a pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines shall comply with the emission standards in Table I of Subpart IIII. (Ref.: 40 CFR 60.4205(a), 40 CFR 89.112, 40 CFR 89.113, and Title V Permit to Operate Issued May 20, 2010)
- 3.B.47 For Emission Points AA-022a through AA-022h, the permittee shall operate and maintain the emission points that achieve the emission standards according to the manufacturer's written instructions or procedures developed by the permittee, that are approved by the engine manufacturer, over the entire life of the engine. (Ref.: 40 CFR 60.4206 and Title V Permit to Construct Issued August 27, 2007)
- 3.B.48 For Emission Points AA-022a through AA-022h, the permittee shall comply with the following:
- (a) Beginning October 1, 2010, if the permittee uses diesel fuel, then the permittee shall use diesel fuel that meets the following requirements as described by 40 CFR 80.510(b) for nonroad diesel fuel:
 - (1) Sulfur content.
 - (i) 15 ppm maximum for nonroad diesel fuel.
 - (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or

- (ii) A maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 60.4207(a) thru (c) and Title V Permit to Operate Issued May 20, 2010)

3.B.49 For Emission Points AA-022a through AA-022h, the permittee shall comply with the following:

- (a) After December 31, 2008, the permittee may not install a unit that does not meet the applicable requirements for 2007 model year engines.
- (b) In addition to the requirements specified in 40 CFR 60.4205 and 60.4206, it is prohibited to import a unit with a displacement of less than 30 liters per cylinder that does not meet the applicable requirements as described by 40 CFR 60.4208(a) through (h):
 - (1) After December 31, 2008, the permittee may not install stationary CI ICE (excluding fire pump engines) that does not meet the applicable requirements for 2007 model year engines.
 - (2) After December 31, 2009, the permittee may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that does not meet the applicable requirements for 2008 model year engines.
 - (3) After December 31, 2014, the permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that does not meet the applicable requirements for 2013 model year non-emergency engines.
 - (4) After December 31, 2013, the permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that does not meet the applicable requirements for 2012 model year non-emergency engines.
 - (5) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above KW (750 HP), that does not meet the applicable requirements for 2011 model year non-emergency engines.
 - (6) After December 31, 2016, the permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that does not meet the applicable requirements for 2015 model year non-emergency engines.
 - (7) In addition to the requirements specified in 40 CFR 60.4201, 40 CFR 4202, 40 CFR 4204, and 40 CFR 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that does not meet the applicable requirements specified in (1) through (7) (40 CFR 60.4208(a) through (f) of this condition after the dates specified in Conditions (1) through (7) (40 CFR 60.4208(a) through (f)).
 - (8) The requirements of this section do not apply to stationary CI ICE that have been modified, reconstructed, and does not apply to engines that

were removed from one existing location and reinstalled at a new location.

(Ref.: 40 CFR 60.4208(a) thru (h) and Title V Permit to Operate Issued May 20, 2010)

3.B.50 For Emission Points AA-022a through AA-022h, if the permittee does not use diesel fuel, the permittee may petition the DEQ for approval of alternative emission standards, if the permittee can demonstrate that the permittee uses a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required by 40 CFR 60.4202 using such fuels. (Ref.: 40 CFR 60.4217 and Title V Permit to Operate Issued May 20, 2010)

3.B.51 Emission Point AA-022i is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ.

Emission Point AA-022i is a new spark ignition (SI) four stroke, lean burn (4SLB) emergency stationary RICE (as defined in 40 CFR 60.4248) with a site rating of greater than 25 HP located at an area source of HAP emissions. As such, this emission point shall comply with 40 CFR Part 63, Subpart ZZZZ by remaining in compliance with all applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ. (Ref.: 40 CFR 63.6590(c)(1) and 40 CFR 60.4230(a)(4)(iv))

3.B.52 For Emission Point AA-022i, the permittee shall operate the emergency engine according to the requirements in paragraphs (a) through (c) below. In order for the engine to be considered an emergency stationary ICE under Subpart JJJJ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) below, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (a) through (c), the engine will not be considered an emergency engine under Subpart JJJJ and must meet all requirements for non-emergency engines.

- (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (b) The emergency engine may be operated for any combination of the purposes specified in paragraphs (i) through (iii) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) of this Condition counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (i) The engine 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 owner or operator may petition the MDEQ for approval of additional hours to be used for

maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.

- (c) The engine 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 provided in paragraph (b). Except as provided in paragraph (i) below, the 50 hours per 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 60.4243(d))

- 3.B.53 For Emission Point AA-022i, the permittee shall limit the emissions of Nitrogen Oxides and Hydrocarbons ($\text{NO}_x + \text{HC}$) to no more than 10 grams per horsepower-hour (g/HP-hr). The permittee shall also limit the emissions of Carbon Monoxide (CO) to no more than 387 g/HP-hr. The permittee shall maintain compliance with these emissions standards for the entire life of the engine. (Ref.: 40 CFR 60.4233(d); Table 1 to 40 CFR Part 60, Subpart JJJJ; and 40 CFR 60.4234)
- 3.B.54 For Emission Points AA-003 and AB-003, the permittee is subject to and shall comply with the applicable provisions of 40 CFR 63, Subpart A and Subpart YYYYYY-National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities. (Ref.: 40 CFR 63.10680, 40 CFR 63.10690(a) and Title V Permit to Operate Issued May 20, 2010)
- 3.B.55 For Emission Points AA-003 and AB-003, the permittee is subject to 40 CFR 63-Subpart YYYYYY and shall determine compliance with the Emission Limitation of 0.0052 gr/dscf by achieving compliance with the BACT Emission Limitation of 0.0018 gr/dscf in Condition 3.B.10 of the permit herein, which is more stringent. (Ref.: 40 CFR 60.272a, 40 CFR 63.10686(b)(1) and Title V Permit to Operate May 20, 2010)
- 3.B.56 For Emission Points AA-003 and AB-003, the permittee is subject to 40 CFR 63-Subpart YYYYYY and shall determine compliance with the Emission Limitation of 6% Opacity by achieving compliance with the Emission Limitation of 6% Opacity in Condition 3.B.15 of the permit herein and utilize the Direct Evacuation Control System and Fabric Filter Baghouse. (Ref.: 40 CFR 60.272a, 40 CFR 63.10686(b)(2) and Title V Permit to Operate Issued May 20, 2010)
- 3.B.57 For Emission Points AA-002, AB-002, AA-005a, and AB-005b, the permittee is subject to the applicable provisions of 40 CFR 64-Compliance Assurance Monitoring provisions. (Ref.: 40 CFR 64.2(a))
- 3.B.58 For Emission Points AA-003a, AB-003a, and AA-006a, the permittee shall limit the opacity of emissions to no more than 10% as determined by EPA Test Method 9. (Ref.: Permit to Construct issued May 1, 2014)
- 3.B.59 For Emission Points AA-003a, AB-003a, and AA-006a, the maximum permissible

emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship

$$E = 0.8808 \cdot I^{-0.1667}$$

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.B.60 Emission Points AA-003a, AB-003a, and AA-006a shall limit the emissions of SO₂ by combusting only natural gas during operation. (Ref.: Permit to Construct issued May 1, 2014)

- 3.B.61 For Emission Points AA-030a and AA-030b, the permittee shall not exceed the emission rate of ash and/or particulate matter as determined by the following equation:

$$E = 0.8808 \cdot I^{-0.1667}$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in million BTU per hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

- 3.B.62 For Emission Point AA-030, 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 subject to the exceptions provided below:

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(1)-(3).)

- 3.B.63 For Emission Point AA-030, 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 11 Miss. Admin. Code Pt. 2, R. 1.3.A(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.B.64 For Emission Point AA-030, the permittee is subject to and shall comply with all applicable requirements of 40 CFR 60, Subpart TT – The Standards of Performance for Metal Coil Surface Coating.

Emission Point AA-030 is a metal coil surface coating operation that was constructed after January 5, 1981. As such, it is an affected unit under 40 CFR 60, Subpart TT and is subject to and shall comply with the applicable VOC emission limits, recordkeeping and reporting requirements. (Ref.: 40 CFR 60.460)

- 3.B.65 For Emission Point AA-030, the permittee shall limit volatile organic compound (VOC) emissions to no more than 39.0 tons/year (TPY) as determined for each consecutive 12-month period. (Ref.: Permit to Construct issued January 22, 2016)
- 3.B.66 For Emission Point AA-030, the permittee shall limit the emission of VOCs to 10 percent of the VOC's applied for each calendar month (90 percent emission reduction).

The permittee shall demonstrate compliance with this condition by complying with Condition 3.B.67, which is more stringent. (Ref.: 40 CFR 60.462(a)(3))

- 3.B.67 For Emission Point AA-030, the permittee shall limit VOC emissions from coating to no more than 1 percent of the VOC mixed or applied for each calendar month (99 percent reduction). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.B.68 For Emission Point AA-030, the permittee shall maintain a 100% capture efficiency for the closed vent system. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.B.69 For Emission Point AA-030, the permittee shall establish operating limits for the following parameters during the performance testing outlined in Section 5.B of this permit. The permittee must meet the operating limits at all times after they have been established.
- (a) For the thermal oxidizer (AA-030b), a minimum 3-hour rolling average combustion temperature.
 - (b) For the closed vent system, the operating parameter(s) and limit(s) identified in the monitoring plan developed in accordance with Section 5.B of this permit.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.B.70 For Emission Point AA-030, the permittee shall operate the closed vent system and the thermal oxidizer at all times when a coating containing VOC/HAPs is being applied. There shall be no bypass of the closed vent system and/or thermal oxidizer during these times. (Ref: Permit to Construct issued January 22, 2016)
- 3.B.71 For Emission Points AA-017b, AC-017a, and AC-017b, the maximum permissible emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship

$$E = 0.8808 \cdot I^{-0.1667}$$

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.B.72 For Emission Points AA-017b, AC-017a, AC-017b, and AC-017c, 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 subject to the exceptions provided below:

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(1)-(3).)

- 3.B.73 For Emission Point AC-017, 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 11 Miss. Admin. Code Pt. 2, R. 1.3.A(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.B.74 For Emission Points AA-017a and AA-017b, the permittee shall limit total combined emissions of NO_x to no more than 42.64 tpy, as determined for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit modified [DATE])

- 3.B.75 For Emission Point AC-017a, the permittee shall limit annual natural gas combustion to no more than 79 MMSCF as determined for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit modified [DATE])

- 3.B.76 For Emission Point AC-017b, the permittee shall limit annual natural gas combustion to no more than 534 MMSCF as determined for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit modified [DATE])

- 3.B.77 For Emission Point AC-017b, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial Commercial Steam Generating Units and Subpart A - General Provisions. Because only natural gas is combusted, there are no specific emission standards applicable to the Waste Heat Boiler. (Ref.: 40 CFR 60.40c(a))

- 3.B.78 For Emission Point AC-017c, the permittee shall not exceed a PM emission rate of 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a).)

- 3.B.79 For Emission Point AC-017c, the permittee shall limit annual natural gas combustion to no more than 15 MMSCF as determined for each consecutive 12-month period on a rolling basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit modified [DATE])

- 3.B.80 For Emission Point AC-017, the permittee shall limit emissions of Particulate Matter (PM/PM₁₀) by operating a Mist Eliminator at all times AC-017 is operating. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit modified [DATE])

- 3.B.81 For Emission Point AA-029, the permittee shall limit the annual hours in which the gas stream from the ATR may bypass the waste gas burner of Emission Point AA-027 and

be vented directly to the atmosphere to no more than 2,000 hours per year. (Ref.: Title V Operating Permit modified [DATE])

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs/MMBTU

- 3.C.1 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.C.2 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 (measured as sulfur dioxide) per million BTU heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-022a AA-022b AA-022c AA-022d AA-022e AA-022f AA-022g AA-022h	<ul style="list-style-type: none"> • 40 CFR Part 60, Subpart IIII (§60.4209) • 40 CFR Part 60, Subpart IIII (§60.4211(a), (c), and (e)) • 40 CFR Part 60, Subpart IIII (§60.4212) • Title V Permit to Operate Issued May 20, 2010 	3.D.1	Exhaust Emissions	Monitoring Requirements
AA-022i	40 CFR Part 60, Subpart JJJJ (§60.4237(c))	3.D.2	Exhaust Emissions	Install a non-resettable hour meter

3.D.1 For Emission Point AA-022, the permittee shall install a non-resettable hour meter prior to startup of the engine. In addition, the permittee shall also meet the following monitoring requirements as described by 40 CFR 60.4211:

- (a) The permittee shall operate and maintain according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer
- (b) The permittee of a pre-2007 model year stationary CI internal combustion engine shall comply with the emission standards specified in 40 CFR 60.4205(a) and shall demonstrate compliance by purchasing an engine certified according to Table 1 of Appendix B, as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications.
- (c) If the permittee operates a 2007 model year and later stationary CI internal combustion engine and shall comply with the emission standards specified in 40 CFR 60.4205(b), the permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications.
- (d) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. For permittees of emergency engines meeting standards under 40 CFR 60.4205, any operation other than emergency operation, and maintenance and testing as permitted in the

permit herein, is prohibited.

(Ref.: 40 CFR 60.4209(a), 40 CFR 60.4211(a), (c), and (e), 40 CFR 60.4212, and Title V Permit to Operate Issued May 20, 2010)

- 3.D.2 For Emission Point AA-022i, the permittee shall install a non-resettable hour meter to demonstrate that the engine is still applicable to emergency engine status, as defined in Section 3. (Ref.: 40 CFR 60.4237(c))

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)
- 5.A.3 Except where a longer duration is specified in an applicable requirement, 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 strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, 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).)
- 5.A.5 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) days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in

equipment or operation.

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-003, AB-003, AA-004, and AB-004	PSD Construction Permit Issued March 31, 2005 and August 27, 2007 and Title V permit modified [Date]	5.B.1	VOC	Biennial Stack/Performance Testing for demonstrating compliance with BACT Limits <i>(Includes terms for reducing the stack/performance testing frequency to once every five years)</i>
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007 and Title V permit modified [Date]	5.B.2	NO _x , CO, and SO ₂	Installation and Operation of CEMS Deadline (Continuous Emission Monitoring System)
AA-002 and AB-002	PSD Construction Permit Issued March 31, 2005 and August 27, 2007 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.3	PM ₁₀	Biennial Stack/Performance Testing for demonstrating compliance with BACT Limits <i>(Includes terms for reducing the stack/performance testing frequency to once every five years)</i>
			Lead	
AA-005b, AA-015b, AA-017d, and AB-005b	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.4	NO _x	Once Every Five Years Stack/Performance Testing for demonstrating compliance with BACT Limits
			CO	
AA-005b, AB-005b, AA-006, AB-006, AA-007, AB-007, AA-009, AB-009, AA-010, AA-011, AB-011, AA-015b, AA-016, AB-016a, AA-017a, AB-017a, and AA-017d	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.5	NO _x	Utilize Good Combustion Practices and Implement Maintenance Guidelines for demonstrating compliance with BACT
			CO	
			PM ₁₀	
			VOCs	
AA-005a and AB-005a	• PSD Construction Permit Issued March 31, 2005 and August 27, 2007 • 40 CFR Part 64 (§64.3)	5.B.6	CO	Utilize Good Combustion Practices and Implement Maintenance Guidelines for demonstrating compliance with BACT

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-018, AA-019, AA-020, and AA-021	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.7	PM/PM ₁₀	Implement Maintenance Guidelines for demonstrating compliance with BACT
AA-015a and AB-015a	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.8	PM ₁₀	Implement Maintenance Guidelines for demonstrating compliance with BACT
		5.B.9	HCl	Once Every Five Years Stack/Performance Testing for demonstrating compliance with BACT Limits
AA-000	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.10	Emission Limitations	Maintain all records necessary to demonstrate compliance
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.11	Natural Gas	Usage on a Monthly Basis
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.12	NO _x	Determine the Emission Rate for each consecutive 12-month period.
			CO	
			SO ₂	
			VOCs	
			PM	
			PM ₁₀	
			Individual HAP	
			Total HAPs	
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.13	Steel	Determine the production for each consecutive 12-month period.
AA-002, AB-002, AA-003, AB-003, and AA-023	40 CFR Part 60, Subpart AAa (§60.273a(c), and (e) through (g))	5.B.14	Emissions Monitoring	Standards of Performance
AA-002, AB-002 AA-003, and AB-003	40 CFR Part 60, Subpart AAa (§60.275a)	5.B.15	Performance Test	Performance Testing Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-005b, AB-005b, AA-015b, AA-017d, and AC-017b (Waste Heat Recovery Boiler)	40 CFR Part 60, Subpart Dc (§60.48c(g)(2))	5.B.16	Subpart Dc Requirements	Recordkeeping
AA-000	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.17	Opacity	Demonstrate Compliance utilizing EPA Method 22 or EPA Method 9
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.B.18	Pre-Test Conference	30 days prior to performance testing any emission point
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.B.19	Control Equipment	Regular Maintenance shall be maintained and kept in log form.
AA-001	40 CFR 63, Subpart YYYYYY (§63.10685)	5.B.20	Scrap Management Plan	Develop and Implement for Compliance with Subpart YYYYYY
AA-003a, AB-003a, and AA-006a	Permit to Construct issued May 1, 2014	5.B.21	Fuel Usage	Monitor and keep monthly records of the amount of natural gas burned
AA-030	• 40 CFR 60, Subpart A (§60.8(a)) • 40 CFR 60, Subpart TT (§60.463(b))	5.B.22	VOC	Initial and monthly performance testing
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.23		Monitoring – Characterization and Usage of each VOC Containing Material
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.24		Calculate VOC emission rate for each consecutive 12-month period (monthly)
	40 CFR 60, Subpart TT (§60.463(c)(2))	5.B.25		Determine overall reduction efficiency (monthly)
	40 CFR 60, Subpart TT (§60.464(c))	5.B.26		Monitoring – Thermal oxidizer temperature monitoring (continuous)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.27		Recordkeeping – VOC Emissions
	40 CFR 60, Subpart TT (§60.466(a-c))	5.B.28		Performance test methods

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-030	• 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). • 40 CFR 60, Subpart A (§60.8(a))	5.B.29	VOC	Initial and Biennial Performance Tests – Destruction efficiency of thermal oxidizer
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.30		Initial and annual determination of closed vent system capture efficiency
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.31		Monitoring – Thermal oxidizer temperature monitoring (continuous)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.32		Closed vent system monitoring plan
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.33 5.B.34		Recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.35	HAP	Monitoring – Characterization and Usage of each HAP Containing Material
		5.B.36		Calculate HAP emission rate for each consecutive 12-month period (monthly)
		5.B.37		Recordkeeping
AA-017b	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.38	NO _x	Once Every Five Years Stack/Performance Testing
AA-017a and AA-017b	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.39	NO _x	Determine monthly and 12-month rolling total combined NO _x emissions
AC-017a, AC-017b and AC-017c	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.40	Fuel Usage	Monitor and keep monthly records of the amount of natural gas burned
AC-017	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.41	PM/PM ₁₀	Operate and Maintain Mist Eliminator in accordance with Manufacturer's Recommendations
AA-029	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).	5.B.42	Operations	Monitor and keep monthly records of the number of hours operated

- 5.B.1 For Emission Points AA-003, AB-003, AA-004, and AB-004, the permittee shall perform biennial stack/performance testing using EPA Reference Method 25A, or an alternative EPA-approved test method, at Emission Points AA-002 and AB-002, for demonstrating compliance with the individual VOC BACT limits at AA-003, AB-003, AA-004, and AB-004 of the federally enforceable permit herein. The results of the stack test shall be compared to the combined BACT limits from each furnace (i.e., the EAF and LMF) venting through the respective DEC System (i.e., Emission Points AA-002 and AB-002). The first biennial stack test shall occur no later than 12 months following the issuance of this permit. Any subsequent stack/performance testing shall occur no later than 24 months following the previous biennial test.

If the permittee demonstrates a sufficiently large margin of compliance with the VOC limitations, as demonstrated by the required biennial stack/performance testing over the life of the current issuance of this permit, then the frequency of stack/performance testing for VOC for these emissions points shall be reduced to once every five years upon the next reissuance of this permit. For the purposes of this condition, a “sufficiently large margin of compliance” shall be interpreted as stack/performance test results which are less than or equal to 50.0% of the respective emission limitation.

During the performance test, the permittee shall monitor the following:

- (a) Charge weights and materials, tap weights, and materials
- (b) Heat times, including start and stop times and a log of process operations, including periods of no operating during testing.
- (c) Control device operation log; and
- (d) Continuous Opacity Monitor or Reference Method 9 data.

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007 and Title V permit modified [Date])

- 5.B.2 To demonstrate compliance with the NO_x, CO, and SO₂ BACT limits for Emission Points AA-003, AB-003, AA-004, and AB-004, the permittee shall install and operate a Continuous Emissions Monitoring System (CEMS) for monitoring the emissions of NO_x, CO, and SO₂, according to the manufacturer’s design, specifications, and recommendations which have been incorporated into the approved protocol. Also, upon operation of the CEMS, the permittee will no longer be required to provide MDEQ with updates/changes, nor maintain monitoring, recordkeeping, or reporting requirements of the Scrap Management Plans.

- (a) Pounds per hour limits will be calculated in the following way:

- (1) Emissions will be recorded as long as the baghouse fans are operating (baghouse fans operate constantly except for major facility shutdowns).
- (2) Emissions will be calculated based on a 168-hour rolling average.
- (b) Pounds per ton limits will be calculated in the following way:
 - (1) Emissions will be recorded as long as the Electric Arc Furnace and Caster are both in operation (production is “on”).
- (c) Production will be calculated at the end of every day:
 - (1) Total tons of liquid steel tapped from 12:00 midnight through 11:59pm/total minutes of “on” production.
 - (2) This production rate will then be used with the pounds per hour emission rate to calculate a pounds per ton emission rate.
 - (3) Each Sunday, an average for the previous week will be calculated.
 - (4) A 13 week average of these weekly numbers will be reported for compliance.

The CEMS results shall be compared to the combined BACT limits from each furnace (i.e., the EAF and LMF) venting through the respective DEC System (i.e., Emission Points AA-002 and AB-002). The CEMS shall meet the applicable performance specifications required by 40 Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR 60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F, 5.1.1, 5.1.3, and 5.1.4, the permittee may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMs at least once every three (3) years. The permittee shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007 and Title V permit modified [Date])

5.B.3 For Emission Points AA-002 and AB-002, the permittee shall perform biennial stack/performance testing for demonstrating compliance with the individual PM₁₀ and Lead Limits of the federally enforceable permit herein. The first biennial stack test shall occur no later than 12 months following the issuance of this permit. Any subsequent stack/performance testing shall occur no later than 24 months following the previous biennial test.

- (a) The permittee shall utilize the following Test Method or an EPA approved test method:
 - (1) For PM, PM₁₀, the permittee shall utilize EPA Reference

Method 5 or 5D.

- (b) During the performance test, the permittee shall monitor the following:
- (1) Charge weights and materials, tap weights, and materials
 - (2) Heat times, including start and stop times and a log of process operations, including periods of no operation during testing.
 - (3) Control device operations log; and
 - (4) Continuous Opacity Monitor or Reference Method 9 data.

If the permittee demonstrates a sufficiently large margin of compliance with the PM₁₀ and Lead limitations, as demonstrated by the required biennial stack/performance testing over the life of the current issuance of this permit, then the frequency of stack/performance testing for PM₁₀ and Lead for these emissions points shall be reduced to once every five years upon the next reissuance of this permit. For the purposes of this condition, a “sufficiently large margin of compliance” shall be interpreted as stack/performance test results which are less than or equal to 50.0% of the respective emission limitation.

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007; 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.B.4 For Emission Points AA-005b, AB-005b, AA-015b, and AA-017d, the permittee shall perform a stack/performance test once every five years for demonstrating compliance with the NO_x and CO BACT Limits of the federally enforceable permit herein. The permittee shall stack test for NO_x and CO simultaneously.

- (a) The permittee shall utilize the following Test Methods or an alternative EPA approved test method:
- (1) For NO_x, and CO, the permittee shall utilize the Test Methods specified in Condition 5.B.1 of the federally enforceable permit herein.

(Ref.: PSD Construction Permit Issued March 31, 2005, and August 27, 2007)

- 5.B.5 For Emission Points AA-005b, AB-005b, AA-006, AB-006, AA-007, AB-007, AA-009, AB-009, AA-010, AA-011, AB-011, AA-015b, AA-016, AB-016a, AA-017a, AB-017a, and AA-017d, the permittee shall utilize good combustion practices and implement a program to maintain the systems per the manufacturer’s maintenance guidelines for demonstrating compliance with the individual BACT Limits for NO_x, CO, PM₁₀, and VOCs of the federally enforceable permit herein. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 5.B.6 For Emission Points AA-005a and AB-005a, the permittee shall utilize good combustion practices and implement a program to maintain the systems per the manufacturer’s maintenance guidelines for demonstrating compliance with the individual BACT Limit for CO. Furthermore, the permittee shall comply with the Emission Point pollutant specific Compliance Assurance Monitoring (CAM) plan, the specifics of which can be found in Appendix B of the federally enforceable permit

herein. (Ref.: PSD Construction Permit Issued March 31, 2005, August 27, 2007, and 40 CFR 64.3)

- 5.B.7 For Emission Points AA-018, AA-019, AA-020, and AA-021, the permittee shall implement a program to maintain the systems per the manufacturer's maintenance guidelines for demonstrating compliance with the individual BACT Limits for PM/PM₁₀ of the federally enforceable permit herein. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.8 For Emission Points AA-015a and AB-015a, the permittee shall implement a program to maintain the systems per the manufacturer's maintenance guidelines for demonstrating compliance with the individual BACT Limit for PM₁₀ of the federally enforceable permit herein. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.9 For Emission Points AA-015a and AB-015a, the permittee shall perform stack / performance testing once every five years for demonstrating compliance with the HCl BACT Limits respectively, of the federally enforceable permit herein. The permittee shall utilize the following Test Methods or an alternative EPA approved test method: For HCl, the permittee shall utilize EPA Reference Method 26A. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.10 For the Entire Facility, the permittee shall keep all records necessary to demonstrate compliance with the Emission Limitations of Section 3. These records shall be maintained for five years, as well as any other data necessary to demonstrate compliance and not expressed herein. These records shall contain the monthly and twelve consecutive month emission rates for the Emission Point specific BACT Emission Limits and the Facility Wide Emission Limitations. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.11 For the Entire Facility, the permittee shall keep a record of natural gas usage rates on a monthly basis for all combustion equipment. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.12 For the Entire Facility, the permittee shall determine the Facility Wide NO_x, CO, SO₂, VOCs, PM, PM₁₀, Individual HAP, and Combined HAPs Emission Rate as determined for each consecutive 12-month period by utilizing data obtained from Stack / Performance Testing, Natural Gas Usage Records, and any other data necessary to demonstrate compliance with the corresponding conditions found in Section 3 of the federally enforceable permit herein. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.13 For the Entire Facility, the permittee shall determine the Facility Wide Steel Production by utilizing data obtained from Purchasing, Processing, and Production Records, and any other data necessary to determine the Facility Wide Production Rate as determined

for each consecutive 12-month period. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 5.B.14 For Emission Points AA-002, AB-002, AA-003, AB-003, and AA-023, the permittee shall comply with the following Standards of Performance for Emissions Monitoring as described by 40 CFR 60.273:
- (a) A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the permittee elects not to install and operate a continuous opacity monitoring system as provided for under paragraph (d). In addition, the permittee shall meet the visible emissions observation requirements in paragraph (d). The bag leak detection system must meet the specifications and requirements of paragraphs (a)(1) through (8).
 - (1) The bag leak detection system must be certified by the manufacturer to be capable of detection particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
 - (2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.)
 - (3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph (a)(4) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.
 - (4) For each bag leak detection system required by paragraph (a), the permittee shall develop and submit to the DEQ, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of this paragraph (a)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:
 - (i) Installation of the bag leak detection system;
 - (ii) Initial and period adjustment of the bag leak detection system including how the alarm set-point will be established;
 - (iii) Operation of the bag leak detection system including quality assurance procedures;
 - (iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
 - (v) How the bag leak detection system output shall be recorded and stored.
 - (5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the

- averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
- (6) Following initial adjustment, the owner operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the DEQ except as provided for in paragraph (a)(6)(i) and (ii).
 - (i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under paragraphs (a)(4).
 - (ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under paragraph (d) and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.
 - (7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
 - (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (b) For each bag leak detection system installed according to paragraph (a), the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph (c), the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective actions(s) are necessary. Corrective actions may include, but are not limited to, the following:
- (1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in particulate emissions;
 - (2) Sealing off defective bags or filter media;
 - (3) Replacing defecting bags or filter media or otherwise repairing the control device;
 - (4) Sealing off a defective baghouse compartment;
 - (5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and
 - (6) Shutting down the process producing the particulate emissions.
- (c) In approving the site-specific monitoring plan required in paragraph (a)(4), DEQ may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the

condition as expeditiously as practicable.

- (d) A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure or positive-pressure fabric filter if observations of the opacity of the visible emission from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the owner installs and continuously operates a bag leak detection system according to paragraph (a). Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the Method 9 observations must be made from the site of the highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a).

(Ref.: 40 CFR 60.273a(c) and (e) through (g))

5.B.15 For Emission Points AA-002, AB-002, AA-003, and AB-003, the permittee shall comply with the following for determining compliance with 40 CFR 60.275a:

- (a) During performance tests required in 40 CFR 60.8, the permittee shall not add gaseous diluent to the effluent gas after the fabric in any pressurized fabric collector, unless the amount of dilution is separately determined and considered in the determination of emissions.
- (b) When emissions from any EAF(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the permittee shall use either or both of the following procedures during a performance test (see also 40 CFR 60.276(a)(e):
 - (1) Determine compliance using the combined emissions.
 - (2) Use a method that is acceptable to the DEQ and that compensates for the emissions from the facilities not subject to the provisions of this subject.
- (c) When emissions from any EAF(s) are combined with emissions from facilities not subject to the provisions of this subpart, the permittee shall use either or both of the following procedures to demonstrate compliance with 40 CFR 60.272(a)(3):
- (d) In conducting the performance test required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- (e) The owner or operator shall determine compliance with the particulate matter

standards in 40 CFR 60.272 as follows:

- (1) Method 5 shall be used for negative-pressure fabric filters and other types of control devices and Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and, if applicable, the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.5 dscm (160 dscf) and, when a single EAF is sampled, the sampling time shall include an Integral number of heats.
- (2) When more than one control device serves the EAF(s) being tested, the concentration of particulate matter shall be determined using the following equation:

$$C_{st} = \left[\sum_{i=1}^n (C_{si} Q_{sdi}) \right] / \sum_{i=1}^n Q_{sdi}$$

where:

c_{st} = average concentration of particulate matter, mg/dscm (gr/dscf).

c_{si} = concentration of particulate matter from control device "i", mg/dscm (gr/dscf).

n = total number of control devices tested.

Q_{sdi} = volumetric flow rate of stack gas from control device "i", dscm/hr (dscf/hr)

- (3) Method 9 and the procedures of 40 CFR 60.11 shall be used to determine opacity.
 - (4) To demonstrate compliance with 40 CFR 60.272(a)(1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.
- (f) To comply with 40 CFR 60.274a(c), (f), (g), and (h), the owner and operator shall obtain the following information in these paragraphs during the particulate matter runs:
- (1) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under 40 CFR 60.272a(a)(3) and at any other time that the DEQ may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to 40 CFR 60.274a(b). The permittee may petition the DEQ for reestablishment of these parameters whenever the permittee can demonstrate to the DEQ's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters are determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than

- baseline values may be subject to the requirements of 40 CFR 60.276a(c).
- (2) Except as provided for under 40 CFR 60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC System, the permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ± 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
 - (3) Except as provided for under 40 CFR 60.273a(d), when the owner or operator of an EAF controlled by a DEC is required to demonstrate compliance with the standard under 40 CFR 60.272a(a)(3), and at any other time the DEQ may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under paragraph (f). The permittee may petition the DEQ for reestablishment of the pressure whenever the permittee can demonstrate to the DEQ's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the DEQ to be unacceptable operation and maintenance of the affected facility.
 - (4) During any performance test required under 40 CFR 60.8, and for any report thereof required by 40 CFR 60.276a(f), or to determine compliance with 40 CFR 60.272a(a)(3), the permittee shall monitor the following information for all heats covered by the test:
 - (i) Charge weights and materials, and tap weights and materials;
 - (ii) Heat times, including start and stop times, and a log of process operation, including period of no operation during testing and the pressure inside an EAF when direct-shell evacuation control systems are used;
 - (iii) Control Device Operation log; and
 - (iv) Continuous opacity monitor or Method 9 data.
 - (g) Where emissions from any EAF(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner and operator may use any of the following procedures during a performance test:
 - (1) Base compliance on control of the combined emissions.
 - (2) Utilize a method acceptable to the DEQ which compensates for the emissions from the facilities not subject to the provision of this subpart.

- (3) Any combination of the criteria of paragraphs (g)(1) and (g)(2) of this section.
- (h) Where emissions from any EAF(s) are combined with emissions from facilities not subject to the provisions of this subpart, the owner or operator may use any of the following procedures for demonstrating compliance with 40 CFR 60.272(a)(3):
 - (1) Base compliance on control of the combined emissions.
 - (2) Shut down operation of facilities not subject to the provisions of this subpart.
 - (3) Any combination of the criteria of paragraphs (h)(1) and (h)(2) of this section.
- (i) If visible emission observations are made in lieu of using a continuous opacity monitoring system, as allowed for by 4 CFR 60.273(c), visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it's possible to determine that a number of visible emissions sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emission observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272(a).
- (j) Unless the presence of inclement weather makes concurrent testing infeasible, the permittee shall conduct concurrently the performance test required under 40 CFR 60.8 to demonstrate compliance with 40 CFR 60.272(a)(1), (2), and (3) of this subpart.

(Ref.: 40 CFR 60.275a)

- 5.B.16 For Emission Points AA-005b, AB-005b, AA-015b, AA-017d, and AC-017b (Waste Heat Recovery Boiler), the permittee shall comply with the recordkeeping requirements as described in 40 CFR 60.48c(g)(2)) and record and maintain records of the amount of each fuel combusted during each calendar month. The permittee shall retain all records for at least five years. (Ref.: 40 CFR 60.48c(g)(2))
- 5.B.17 For the Entire Facility, the permittee shall demonstrate compliance with the 10% opacity limit by performing weekly observations utilizing EPA Test Method 22. If any visible emissions are observed for a specific emission point during the observation, then EPA Test Method 9 will be performed for that emission point and the test report shall be submitted based upon compliance of the results. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 5.B.18 For all Emission Points required to perform Performance/Stack Testing, 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 MDEQ. Also, MDEQ shall be notified prior to the scheduled test date. At least TEN (10) DAYS notice should be given so that an observer may be scheduled to witness the test(s). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).)
- 5.B.19 For all Emission Points, regular maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. Records of this maintenance shall be kept in log form and shall be made available for review upon request during any inspection visit by Office of Pollution Control personnel. (Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.B.20 For Emission Point AA-001, the permittee shall develop and implement a Scrap Management Plan as described by 40 CFR 63.10685 for minimizing the contaminants from scrap as follows:
- (a) *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF, the permittee shall comply with the requirements in either Condition (a)(1) or (2) below. The permittee may have certain scrap subject to Condition (a)(1) and other scrap subject to Condition (a)(2) provided the scrap remains segregated until charge make-up.
 - (1) *Pollution prevention plan.* For the production of steel other than leaded steel, the permittee shall prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, the permittee shall prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. The permittee shall submit the scrap pollution prevention plan to the MDEQ for approval. The permittee shall operate according to the plan as submitted during the review and approval process, operate according to approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The permittee shall request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permittee shall keep a copy of the plan onsite, and provide inspection duties. Each plan shall include the information in Conditions (a)(1)(i) through (iv):
 - (i) Specification that scrap materials shall be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

- (ii) A requirement in the permittee's scrap specification for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, wheel weights) from the scrap, except for scrap used to produce leaded steel.
 - (iii) Procedures for determining if the requirements and specifications in Condition (a)(1) are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.
 - (iv) The requirements of Condition (a)(1) do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials the furnace. These exempted materials shall be identified in the pollution prevention plan.
- (2) *Restricted Metallic Scrap.* For the production of steel other than leaded steel, the permittee shall not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, the permittee shall not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastic, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinate plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if the permittee meets the requirements in Condition (b)(3).
- (a) *Mercury requirements.* For scrap containing motor vehicle scrap, the permittee shall procure the scrap pursuant to one of the compliance options in Conditions (b)(1), (2), or (3) for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, the permittee shall procure the scrap pursuant to the requirements in Condition (b)(4) for each scrap provider, contract, or shipment. The permittee shall have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision
 - (1) *Site-specific plan for mercury switches.* The permittee shall comply with the requirements in Conditions (b)(1)(i) through (v).
 - (i) The permittee shall include a requirement in the permittee's scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

- (ii) The permittee shall prepare and operate according to a plan demonstrating how the permittee will implement the scrap specification in Condition (b)(1)(i) for removal of mercury switches. The permittee shall submit the plan to the MDEQ for approval. The permittee shall operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The permittee shall request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan shall include:
 - (A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR Parts 261 through 265 and 268). The plan shall include documentation of direction for appropriate staff to communicate to suppliers through the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;
 - (B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;
 - (C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and
 - (D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in Condition (b)(1)(ii)(C)).

- (iii) The permittee shall require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the permittee's facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.
 - (iv) The permittee shall establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under Condition (b)(1) may require only the removal of convenience light switch mechanisms, the permitting authority will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.
 - (v) For each scrap provider, the permittee shall submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of the mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switched removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in Condition (b)(1)(ii)(A). This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.
- (2) *Option for approved mercury programs.* The permittee shall certify in the notification of compliance status that the permittee participated in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the DEQ based on the criteria in Conditions (b)(2)(i) through (iii). If the permittee purchases motor vehicle scrap from a broker, the permittee shall certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the MDEQ based on the criteria in Conditions (b)(2)(i) through (iii). The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under Conditions (b)(2) of this permit unless and until the DEQ disapproves the program (in part or in whole) under Condition (b)(2)(iii) of this permit.
- (i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

- (ii) The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under Condition (b)(2) may require only the removal of convenience light switch mechanisms, the MDEQ will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other) when evaluating progress towards the 80 percent goal; and
- (iii) The program sponsor agrees to submit progress reports to the MDEQ no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR part 261 through 265 and 268). The progress reports shall be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The MDEQ may change the approval status of a program or portion of a program (e.g., at the State level) following 90 days notice based on the progress reports or on other information.
- (iv) The permittee shall develop and maintain onsite a plan demonstrating the manner through which it is participating in the EPA-approved program.
 - (A) The plan shall include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.
 - (B) The permittee shall provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
 - (C) The permittee shall conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.
- (3) *Option for specialty metal scrap.* The permittee shall certify in the notification of compliance status that the only materials from motor vehicles

in the scrap are material recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

- (4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in Conditions (b)(1) through (3), the permittee shall certify in the notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

(Ref.: 40 CFR 63.10685(a) thru (b) and Title V Permit to Operate Issued May 20, 2010)

- 5.B.21 For Emission Points AA-003a, AB-003a, and AA-006a, the permittee shall monitor and keep monthly records of the amount of natural gas combusted. (Ref.: Permit to Construct issued May 1, 2014)

- 5.B.22 For Emission Point AA-030, the permittee shall conduct an initial performance test as required under 40 CFR 60.8(a) and thereafter a performance test each calendar month according to the procedures outlined in Condition 5.B.25. (Ref.: 40 CFR 60.8(a); 40 CFR 60.463(b))

- 5.B.23 For Emission Point AA-030, the permittee shall determine for each coating, solvent, or other VOC containing material used:

- (a) The quantity used (gallons);
- (b) The percentage of VOCs by weight;
- (c) The percentage of each individual VOC and total VOC by weight;
- (d) The density (lbs/gal);

The permittee may utilize data supplied by the manufacturer, or analysis of VOC content by EPA Test Method 24, 40 CFR 60, Appendix A and/or EPA Test Method 311, 40 CFR 63, Appendix A, and/or an alternate EPA approved test method.

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

- 5.B.24 For Emission Point AA-030, the permittee shall determine the total VOC emission rate in tons/yr for each consecutive 12-month period on a monthly basis. Emission rates shall be determined utilizing a mass balance approach, based on the assumption that 100 percent of all VOCs contained in each coating, solvent, or other VOC containing material used are volatilized, captured by the closed vent system and routed to a thermal oxidizer with a 99 percent minimum destruction efficiency. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.B.25 For Emission Point AA-030, the permittee shall use the following procedures for determining the overall reduction efficiency of the Coating Line emission control systems.

- (1) Determine the overall reduction efficiency (R) for the closed vent system and thermal oxidizer.

For the initial performance test, the overall reduction efficiency (R) shall be determined as prescribed in paragraphs (A), (B), and (C) of this section. Performance testing conducted in accordance with Condition 5.A.8 of this permit will satisfy the initial performance test requirements of this condition. In subsequent months, the permittee may use the most recently determined reduction efficiency (R) for the performance test, providing the thermal oxidizer and closed vent system operating conditions have not changed. The procedure in paragraphs (A), (B), and (C) of this section, shall be repeated when directed by MDEQ or when the permittee elects to operate the thermal oxidizer or closed vent system at conditions different from the initial performance test.

- (A) Determine the fraction (F) of total VOC's emitted by AA-030 that enters the thermal oxidizer using the following equation:

$$F = \frac{\sum_{i=1}^l C_{bi}Q_{bi}}{\sum_{i=1}^l C_{bi}Q_{bi} + \sum_{i=1}^p C_{fi}Q_{fi}}$$

Where:

l is the number of gas streams entering the thermal oxidizer,

p is the number of gas streams emitted directly to the atmosphere,

C_b is the VOC concentration of gas stream i entering the thermal oxidizer (parts per million by volume, as carbon),

Q_{bi} is the volumetric flow rate of gas stream i entering the thermal oxidizer (dry standard cubic meters per hour),

C_{fi} is the VOC concentration of gas stream i emitted directly to the atmosphere (parts per million by volume, as carbon), and

Q_{fi} is the volumetric flow rate of gas stream i emitted directly to the atmosphere (dry standard cubic meters per hour).

- (B) Determine the destruction efficiency of the thermal oxidizer (E, fraction) using values of the volumetric flow rate of each of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the thermal oxidizer by the following equation:

$$E = \frac{\sum_{i=1}^n Q_{bi}C_{bi} - \sum_{i=1}^m Q_{ai}C_{ai}}{\sum_{i=1}^n Q_{bi}C_{bi}}$$

Where:

n is the number of gas streams entering the thermal oxidizer,

m is the number of gas streams leaving the thermal oxidizer and entering the atmosphere,

C_a is the VOC concentration of gas stream i leaving the thermal oxidizer and entering the atmosphere (parts per million by volume, as carbon), and

Q_a is the volumetric flow rate of gas stream i leaving the thermal oxidizer and entering the atmosphere (dry standard cubic meters per hour).

The permittee shall construct the VOC emission reduction system so that all volumetric flow rates and total VOC emissions can be accurately determined by the applicable test methods and procedures specified in 5.B of this permit. The permittee shall construct a temporary enclosure around the coating applicator and flash-off area during the performance test for the purpose of evaluating the capture efficiency of the system. The enclosure must be maintained at a negative pressure to ensure that all VOC emissions are measurable. If a permanent enclosure exists prior to the performance test and MDEQ is satisfied that the enclosure is adequately containing VOC emissions, no additional enclosure is required for the performance test.

- (C) Determine overall reduction efficiency (R , fraction) using the following equation:

$$R = E * F$$

If the overall reduction efficiency (R) is equal to or greater than 0.90, the permittee is in compliance and no further computations are necessary.

(Ref.: 40 CFR 60.463(c)(2))

- 5.B.26 For Emission Point AA-030, the permittee shall install, calibrate, operate, and maintain a device that records the combustion temperature of the thermal oxidizer to achieve compliance with the limitations outlined in Section 3 of this permit. This device shall have an accuracy of ± 2.5 °C or ± 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater, and shall collect data at least once every fifteen (15) minutes. The permittee shall also record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the thermal oxidizer remains more than 28 °C (50 °F) below the temperature at which compliance with the applicable requirements of Section 3 of this permit was demonstrated.

Note: Temperature monitoring device must also meet the specifications contained in the accompanying conditions of this Section. (Ref.: 40 CFR 60.464(c))

- 5.B.27 For Emission Point AA-030, the permittee shall maintain sufficient records to document:
- (a) The identification of each coating, solvent, or other VOC containing material and the total gallons of each coating, solvent, or other VOC containing material used on a monthly basis and in each consecutive 12-month period;
 - (b) The VOC content(s) of each coating, solvent, or other VOC containing material used. A description of the method used to determine the VOC content shall accompany this data;
 - (c) The density of each coating, solvent, or other VOC containing material used;

- (d) The total VOC emission rate in tons/yr for each consecutive 12-month period, determined on a monthly basis.

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

5.B.28 For Emission Point AA-030, the permittee shall comply with the following for determining compliance with the applicable requirements of Section 3 of this permit. Performance testing conducted in accordance with Condition 5.B.28 of this permit will satisfy the requirements of this condition.

- (a) Utilize the Reference Methods in Appendix A of 40 CFR 60, except as provided under 40 CFR 60.8(b) as follows:
- (1) Method 24, or data provided by the formulator of the coating, shall be used for determining the VOC content of each coating as applied to the surface of the metal coil. In the event of a dispute, Method 24 shall be the reference method. When VOC content of waterborne coatings, determined by Method 24, is used to determine compliance, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24;
 - (2) Method 25, both for measuring the VOC concentration in each gas stream entering and leaving the thermal oxidizer;
 - (3) Method 1 for sample and velocity traverses;
 - (4) Method 2 for velocity and volumetric flow rate;
 - (5) Method 3 for gas analysis; and
 - (6) Method 4 for stack gas moisture.
- (b) For Method 24, the coating sample must be at least a 1-liter sample taken at a point where the sample will be representative of the coating as applied to the surface of the metal coil.
- (c) For Method 25, the sampling time for each of three runs is to be at least 60 minutes, and the minimum sampling volume is to be at least 0.003 dscm (0.11 dscf); however, shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by MDEQ.

(Ref.: 40 CFR 60.466(a-c))

5.B.29 For Emission Point AA-030, within 60 days after achieving the maximum production rate at which the Coating Line will operate, but no later than 180 days from the startup of the Coating Line, the permittee shall conduct an initial performance test to establish the destruction or removal efficiency of the thermal oxidizer, according to the methods and procedures in paragraphs (a) and (c) below. Biennial performance tests shall be conducted within 24 months of the last performance test. During the performance testing, the permittee shall establish the operating limits required by Section 3 of this permit, according to paragraph (d) below.

- (a) A performance test to establish the destruction or removal efficiency of the thermal oxidizer shall be conducted such that inlet and outlet testing is conducted

simultaneously. The data must be reduced in accordance with the test methods and procedures in paragraphs (1) through (9) below.

- (1) Method 1 or 1A of 40 CFR Part 60, appendix A, is used for sample and velocity traverses to determine sampling locations.
- (2) Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR Part 60, appendix A, is used to determine gas volumetric flow rate.
- (3) Method 3, 3A, or 3B of 40 CFR Part 60, appendix A, used for gas analysis to determine dry molecular weight. The permittee may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses” (incorporated by reference, see 40 CFR 63.14).
- (4) Method 4 of 40 CFR Part 60, appendix A, is used to determine stack gas moisture.
- (5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run, as specified in paragraph (a)(7) below.
- (6) Method 25 or 25A of 40 CFR Part 60, appendix A, is used to determine total gaseous non-methane organic matter concentration. If it chooses, the permittee may additionally use Method 18 or Method TO-15A to speciate regulated volatile organic compounds by gas chromatography/mass spectrometry. Use the same test method for both the inlet and outlet measurements, which must be conducted simultaneously. The permittee shall submit notification of the intended test method to the MDEQ for approval. The permittee shall use Method 25A if any of the conditions described in paragraphs (A) through (C) below apply to the thermal oxidizer.
 - (A) The oxidizer exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the limits established in Section 3 of this permit; or
 - (B) The volatile organic matter concentration at the inlet to the oxidizer and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or
 - (C) Due to the high efficiency of the oxidizer, the anticipated volatile organic matter concentration at the oxidizer exhaust is 50 ppmv or less, regardless of inlet concentration.
- (7) Each performance test must consist of three separate runs; each run must be conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic matter concentrations and mass flow rates, the average of the results of all runs will apply.
- (8) The permittee shall determine the thermal oxidizer destruction or removal efficiency, for each run, by calculating the volatile organic matter mass flow rates using the following equation:

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6})$$

Where:

M_f =total organic volatile matter mass flow rate, kg/per hour (h).

C_c =concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, ppmv, dry basis. This value may be corrected to include only concentration of regulated VOC as determined by speciation using Method 18 and Method TO-15A.

Q_{sd} =volumetric flow rate of gases entering or exiting the thermal oxidizer, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters (dscm)/h.

0.0416=conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

- (9) For each run, determine the thermal oxidizer destruction or removal efficiency, DRE, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100$$

Where:

DRE=organic emissions destruction or removal efficiency of the thermal oxidizer, percent.

M_{fi} =organic volatile matter mass flow rate at the inlet to the thermal oxidizer, kg/h.

M_{fo} =organic volatile matter mass flow rate at the outlet of the thermal oxidizer, kg/h.

- (10) The thermal oxidizer destruction or removal efficiency (DRE) is determined as the average of the efficiencies determined in the three test runs and calculated in the above equation.
- (b) The permittee shall record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Operations during periods of start-up, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test.
- (c) The permittee shall operate the Coating Line as close to its nominal rated capacity as operating conditions allow during the performance test.
- (d) The permittee shall establish the applicable operating limits required by Section 3 of this permit, which apply to the oxidizer. The permittee shall establish the operating limits during the performance test according to paragraphs (d)(1) through (d)(2) below.
- (1) During the performance test, the permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

- (2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature will be the minimum operating temperature for the thermal oxidizer until the next biennial performance test is conducted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). and 40 CFR 60.8(a))

5.B.30 For Emission Point AA-030, within 60 days after achieving the maximum production rate at which the Coating Line will operate, but no later than 180 days from the startup of the Coating Line, the permittee shall determine capture efficiency of the closed vent system to meet the requirements of Section 3 of this permit. The permittee shall determine capture efficiency using the procedures in (a) and (c) below, as applicable. Biennial closed vent system capture efficiency shall be determined within 24 months of the last determination

- (a) For an enclosure that meets the criteria for a PTE, the permittee may assume it achieves 100 percent capture efficiency. The permittee shall confirm that the capture system is a PTE by demonstrating that it meets the requirements of Section 6 of EPA Method 204 of 40 CFR Part 51, Appendix M (or an EPA approved alternative method), and that all exhaust gases from the enclosure are delivered to the thermal oxidizer.
- (b) Otherwise, the permittee may determine capture efficiency, CE, according to the protocols for testing with temporary total enclosures that are specified in Method 204A through F of 40 CFR Part 51, Appendix M.
- (c) The permittee shall operate the Coating Line as close to its nominal rated capacity as operating conditions allow during the capture efficiency determination.

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

5.B.31 For Emission Point AA-030, the permittee shall demonstrate continuous compliance through continuous monitoring (at least once every 15 minutes) of combustion temperature, in accordance with paragraphs (a) and (b) below. Any period (during actual coating operations) in excess of three (3) hours during which the average temperature in the thermal oxidizer remains more than 28 °C (50 °F) below the minimum oxidizer combustion temperature established during the initial performance test will be considered a deviation from the oxidizer destruction efficiency limit established in Section 3 of this permit.

- (a) Install, calibrate, maintain, and operate temperature monitoring equipment according to manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months or other time period as specified by the manufacturer; or the chart recorder, data logger, or temperature indicator must be replaced. Permittee must replace the equipment either if permittee chooses not to perform the calibration or if the equipment fails a calibration and cannot be re-calibrated properly. Each temperature monitoring device must be equipped with a continuous recorder. The device must have an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or ± 1 °Celsius, whichever is greater.

- (b) Install a thermocouple or temperature sensor in the combustion chamber at the location in the combustion zone established during the most recent performance test.

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

5.B.32 For Emission Point AA-030, the permittee shall develop a closed vent system monitoring plan containing the requirements specified in paragraphs (a) and (b) below. The permittee shall submit the monitoring plan to MDEQ's Environmental Permits Division for approval prior to its implementation, in accordance with the requirements outlined in Section 5.C of this permit. The permittee shall demonstrate continuous compliance with the closed vent system capture efficiency limit contained in Section 3 of this permit by continuously monitoring the system in accordance with the approved plan. The permittee shall maintain the monitoring plan onsite and make it available for inspection by MDEQ personnel, upon request.

- (a) The monitoring plan must:
 - (1) Identify the operating parameter(s) to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (2) Explain why this parameter is appropriate for demonstrating ongoing compliance,
 - (3) Specify operating limits at the closed vent system operating parameter value, or range of values, that demonstrates compliance with the limit contained in Section 3 of this permit. The operating limits must represent the conditions indicative of proper operation and maintenance of the closed vent system, as established during the most recent performance test.
 - (4) Provide the range of the proposed monitoring device(s) and the accuracy of said device(s), and
 - (5) Identify the specific monitoring procedures.
- (b) The plan also must include a schematic including the following information:
 - (1) Emission Sources, closed vent system, thermal oxidizer,
 - (2) Location of monitoring device(s), and
 - (3) Potential bypasses that could divert gases away from the closed vent system and/or thermal oxidizer.

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

5.B.33 For Emission Point AA-030, the permittee shall record the three-hour average thermal oxidizer combustion temperature in accordance with paragraphs (a) through (c) below.

- (a) Record the combustion temperature in accordance with the provisions of this section of the permit a minimum of once every 15 minutes during actual coating operation.
- (b) Calculate a 1-hour average combustion temperature from at least four (4) temperature readings collected at equally spaced intervals during the hour

- (c) Calculate a 3-hour average combustion temperature for each consecutive hour of operation. Compliance will be determined by comparing the thermal oxidizer 3-hour average combustion temperature with the minimum operating limit established in condition 5.A.8(d)(2) above.

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

5.B.34 For Emission Point AA-030, the permittee shall maintain the following records. Condition 5.A.3 contains the permittee's obligations regarding the records required by this permit. Records shall include:

- (a) The occurrence and duration of each exceedance of any applicable emission limitations prescribed in Section 3 of this permit;
- (b) The occurrence and duration of each malfunction of process equipment, the closed vent system or the thermal oxidizer;
- (c) All required maintenance performed on the closed vent system, thermal oxidizer and associated monitoring equipment;
- (d) Corrective actions taken during periods, which exceeded limitations prescribed in Section 3 of this permit (including corrective actions to restore malfunctioning process equipment, the closed vent system or the thermal oxidizer and associated monitoring equipment to its normal or usual manner of operation);
- (e) Each period during which the monitoring equipment for the closed vent system or the thermal oxidizer was malfunctioning or inoperative (including when the monitoring system failed and/or could not be calibrated);
- (f) All required measurements and calculations needed to demonstrate compliance with the limitations prescribed in Section 3 of this permit (including, but not limited to, coating usage/property data, monitoring system data, raw performance testing measurements, and raw performance evaluation measurements);
- (g) All results of performance tests (including thermal oxidizer destruction efficiency determinations and closed vent system capture efficiency determinations) and monitoring system performance evaluations;
- (h) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (i) All monitoring system calibration checks;
- (j) All adjustments and maintenance performed on the monitoring systems;
- (k) All required monitoring system measurements (including: monitoring data recorded during unavoidable monitoring system breakdowns and out-of-control periods);
- (l) The specific identification (i.e., the date and time of commencement and completion) of each period in which closed vent system and thermal oxidizer operating parameter limitations, established according this section of the permit, were exceeded;
- (m) The nature and cause of any malfunction (if known);
- (n) The corrective action taken or preventive measures adopted;
- (o) The nature of the repairs or adjustments to the monitoring system that was inoperative or failed and/or could not be calibrated;
- (p) The total process operating time during the reporting period; and

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

5.B.35 For the Emission Point AA-030, the permittee shall determine for each coating, solvent, or other HAP containing material used:

- (a) The quantity used (gallons);
- (b) The percentage of HAPs by weight;
- (c) The percentage of each individual HAP and total HAP by weight;
- (d) The density (lbs/gal);

The permittee may utilize data supplied by the manufacturer, or analysis of HAP content by EPA Test Method 24, 40 CFR 60, Appendix A and/or EPA Test Method 311, 40 CFR 63, Appendix A, and/or an alternate EPA approved test method. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.B.36 For Emission Point AA-030, the permittee shall determine the emission rate of each individual HAP and the total HAP emission rate in tons/year for each consecutive 12-month period on a monthly basis. The emission rates shall be determined utilizing a mass balance approach, based on the assumption that 100 percent of all HAPs contained in each coating, solvent, or other HAP containing material used are volatilized, captured by the closed vent system and routed to a thermal oxidizer with a 99 percent minimum destruction efficiency. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.B.37 For Emission Point AA-030, the permittee shall maintain sufficient records to document:

- (a) The identification of each coating, solvent, or other HAP containing material and the total gallons of each coating, solvent, or other HAP containing material used on a monthly basis and in each consecutive 12-month period;
- (b) The HAP content(s) of each coating, solvent, or other HAP containing material used. A description of the method used to determine the HAP content shall accompany this data;
- (c) The density of each coating, solvent, or other HAP containing material used;
- (d) The emission rate of each individual HAP and the total HAP emission rate in tons/yr for each consecutive 12-month period, determined on a monthly basis.

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

5.B.38 For the Emission Points AA-017b, within 60 days after achieving the maximum firing rate but not later than 180 days after initial startup of the furnace, the permittee shall conduct an initial performance test for Nitrogen Oxides (NO_x) in accordance with EPA Test Method 7E or an approved equivalent. Each unit shall operate at the maximum firing rate the unit is capable of accommodating based on the type of steel being processed at the time of the stack test, and unit operating load data shall be collected during the test.

Subsequent performance testing must be conducted every 5 years, not to exceed 60 months from the previous stack test. The results from AA-017b shall be used to demonstrate compliance with emission limitations cited in Condition 3.B.74

The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.

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

- 5.B.39 For Emission Points AA-017a and AA-017b, the permittee shall determine the monthly and 12-month rolling total combined NO_x emissions in tons using the actual monthly fuel usage for each furnace and the manufacturer's guaranteed emission factor or the results from the most recent stack test conducted for the furnace. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).)
- 5.B.40 For Emission Points AC-017a, AC-017b, and AC-017c, the permittee shall monitor and keep monthly records of the amount of natural gas combusted. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).)
- 5.B.41 For Emission Point AA-017, the permittee shall implement a program to operate and maintain the mist eliminator per the manufacturer's guidelines and conduct inspections of the mist eliminator on a monthly basis. The permittee shall keep records of inspections, including maintenance performed and any corrective actions taken on the unit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).)
- 5.B.42 For Emission Point AA-029, the permittee shall monitor and keep monthly records of the number of hours that the gas stream from the ATR bypasses the waste gas burner of Emission Point AA-027 and is vented directly to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(3).)

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-002, AB-002, AA-003, AB-003, and AA-023	<ul style="list-style-type: none"> • 40 CFR Part 60, Subpart AAa (§60.276a(a)) • PSD Construction Permit Issued March 31, 2005 and August 27, 2007 	5.C.1	Subpart AAa Requirements	Recordkeeping
AA-000	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.C.2	Performance Testing	Submit results no later than 60 days from actual test.
	PSD Construction Permit Issued March 31, 2005 and August 27, 2007	5.C.3	NOx	Semiannual reporting requirement
			CO	
			SO ₂	
			VOC/HAP	
			Natural Gas	
			Steel	
AA-002, AB-002, AA-003, AB-003, and AA-023	<ul style="list-style-type: none"> • 40 CFR Part 60, Subpart AAa (§60.276a) • PSD Construction Permit Issued March 31, 2005 and August 27, 2007 	5.C.4	40 CFR 60, Subpart AAa	Reporting Requirements
AA-005b, AB-005b, AA-015a, AA-017d, and AC-017b (Waste Heat Recovery Boiler)	40 CFR Part 60, Subpart Dc (§60.48c(a)(1) and (3))	5.C.5	40 CFR 60, Subpart Dc	Reporting Requirements
AA-022a, AA-022b, AA-022c, AA-022d, AA-022e, AA-022f, AA-022g, and AA-022h	40 CFR Part 60, Subpart IIII (§60.4214(b) and (c))	5.C.6	Initial and Continuous	Notification, Recordkeeping, and Reporting Requirements
AA-003 and AB-003	40 CFR Part 63, Subpart YYYYY (§63.10690(b))	5.C.7	40 CFR 63, Subpart YYYYY	Notification of Compliance Status

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-001	40 CFR Part 63, Subpart YYYYYY (§63.10685(c))	5.C.8	Scrap Management Plan	Recordkeeping and Reporting Requirements
AA-030	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.9	VOC	Notification – Performance Tests
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.10		Reporting - Performance Test Results
	40 CFR 60, Subpart TT (§60.465(b))	5.C.11		Reporting – Additional Initial Performance Test Data
	• 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). • 40 CFR, Subpart A (§60.7(c))	5.C.12		Reporting - Semi-Annual Monitoring
AA-017b	11 Miss. Admin. Code Pt. 2, R. 6.A(3)(c)	5.C.13	Performance Testing	Submit results no later than 60 days from actual test.
AA-017b and AC-017b	11 Miss. Admin. Code Pt. 2, R. 6.A(3)(c)(1)	5.C.14	NO _x	Semiannual reporting requirement
AC-017a, AC-017b, and AC-017c	11 Miss. Admin. Code Pt. 2, R. 6.A(3)(c)(1)	5.C.15	Natural Gas	Semiannual reporting requirement
AA-029	11 Miss. Admin. Code Pt. 2, R. 6.A(3)(c)(1)	5.C.16	Hours	Annual reporting requirement

- 5.C.1 For the Emission Points AA-002, AB-002, AA-003, and AA-023, the permittee shall comply with the recordkeeping and reporting requirements as described in 40 CFR 60.276a, Subpart AAa and retain all records for at least five years.
(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007, and 40 CFR 60, Subpart AAa)
- 5.C.2 For all Emission Points required to perform Performance Testing, the permittee shall submit the results of the Performance Testing no later than 60 days of the actual performance test.
(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)
- 5.C.3 For the entire facility, the permittee shall submit semi-annual reports by July 31st and January 31st for the preceding six-month period containing the following;
- The Facility Wide Emission Rates in tons per year, as determined for each consecutive 12-month period, for demonstrating compliance with Conditions 3.B.1, 3.B.2, 3.B.3, 3.B.4, 3.B.5, 3.B.6, 3.B.7, 3.B.8, and 3.B.9.

- (b) The calculated short term BACT Limits for NO_x, CO, SO₂, PM, PM₁₀, VOC, Lead, HCl, and HAP Emission Rates utilizing the requirements of Part III COMPLIANCE REQUIREMENTS AND PERFORMANCE TESTING.
- (c) The natural gas usage rates.
- (d) The Facility Wide Steel Production in tons/year based on a 12-month rolling total.

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

5.C.4 For Emission Points AA-002, AB-002, AA-003, AB-003, and AA-023, the permittee shall comply with the following reporting requirements as described in 40 CFR 60.276a(a) through (g):

- (a) Each owner or operator shall submit a written report of exceedances of the control device opacity to the DEQ semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.
- (b) Operation at a furnace static pressure that exceeds the value established under 40 CFR 60.274a(g) and either operation of control system fan motor amperes at values exceeding ± 15 percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the DEQ to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the DEQ semiannually.
- (c) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the section, provided that they comply with the requirements established by the State.
- (d) When the permittee of an EAF or AOD is required to demonstrate compliance with the standard under 60.275(b)(2) or a combination of (b)(1) and (b)(2) the owner or operator shall obtain approval from the DEQ of the procedure(s) that will be used to determine compliance. Notification of the procedures(s) to be used must be postmarked at least 30 days prior to the performance test.
- (e) For the purpose of this subpart, the permittee shall conduct the demonstration of compliance with 40 CFR 60.272a(a) of this subpart and furnish the DEQ a written report of the results of the test. This report shall include the following information:
 - (1) Facility name and address;
 - (2) Plant representative;
 - (3) Make and model of process, control device, and continuous monitoring equipment;
 - (4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
 - (5) Rated (design) capacity of process equipment

- (6) Those data required under 40 CFR 60.274a(h) of this subpart;
 - (i) List of charge and tap weights and materials;
 - (ii) Heat times and process log;
 - (iii) Control device operation log; and
 - (iv) Continuous opacity monitor or Method 9 data.
 - (7) Test dates and test times;
 - (8) Test company;
 - (9) Test company representative;
 - (10) Test observers from outside agency
 - (11) Description of test methodology used, including any deviation from standards reference methods;
 - (12) Schematic of sampling location;
 - (13) Number of sampling points;
 - (14) Description of sampling equipment;
 - (15) Listing of sampling equipment calibrations and procedures;
 - (16) Field and laboratory data sheets;
 - (17) Description of sample recovery procedures;
 - (18) Sampling equipment leak check results;
 - (19) Description of quality assurance procedures;
 - (20) Description of analytical procedures;
 - (21) Notation of sample blank corrections; and
 - (22) Sample emission calculations
- (f) The permittee shall maintain records of all shop opacity observations made in accordance with 40 CFR 60.273a(d). All shop opacity observations in excess of the emission limit specified in 40 CFR 60.272a(a)(3) (Condition 3.B.15) of this subpart shall indicate a period of excess emission, and shall be reported to the DEQ semi-annually, according to 40 CFR 60.7(c).
- (g) The permittee shall maintain the following records for each bag leak detection system required under 40 CFR 60.273a(e) (Condition 5.B.14(a)):
- (1) Records of the bag leak detection system output;
 - (2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system setting; and
 - (3) An identification of the data and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

(Ref.: 11 Miss. Admin. Code, Pt. 2, Ch. 6, R 6.3.A(3)(b)(2). and 40 CFR 60.276a(b) through (h))

5.C.5 For Emission Points AA-005b, AB-005b, AA-015b, AC-017b (Waste Heat Recovery Boiler) and AA-017d, the permittee shall comply with the following reporting requirements as described in 40 CFR 60.48c(a), Subpart Dc:

- (a) The permittee shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR 60.7. This notification shall include:
 - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - (2) The annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(Ref.: 40 CFR 60.48c(a)(1) and (3))

5.C.6 For Emission Points AA-022a through AA-022h, the permittee is not required to submit an initial notification for compliance with 40 CFR 60, Subpart IIII. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure light of the engine is approached.
(Ref.: 40 CFR 60.4214(b) and (c))

5.C.7 For Emission Point AA-003 and AB-003, the permittee shall comply with the Notification of Compliance Status requirements of 40 CFR 63.10690(b) as required by 40 CFR 63.9(h). (Ref.: 40 CFR 63.10690(b))

5.C.8 For Emission Point AA-001, the permittee shall comply with the following Recordkeeping and Reporting Requirement for maintaining compliance with the Scrap Management Plan:

- (a) The permittee shall keep records to demonstrate compliance with the requirements for the permittee's pollution prevention plan and/or for the use of only restricted scrap in Section 5.B of the permit herein and for mercury in Section 5.B herein as applicable. The permittee shall keep records documenting compliance with the applicable requirements of Section 5.B of the permit herein for scrap that does not contain motor vehicle scrap.
 - (1) If the permittee is subject to the requirements for a site-specific plan for mercury of this permit, the permittee shall:
 - (i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and
 - (ii) Submit semiannual reports of the number of mercury switches

removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semi-annual reports shall include a certification that the permittee has conducted inspections or taken other means of corroboration as required under this permit. The permittee shall include this information in the semiannual compliance reports required under Condition (c)(3) of this permit.

- (2) If the permittee is subject to the option for approved mercury programs under this permit, the permittee shall maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the permittee purchases motor vehicle scrap from a broker, the permittee shall maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch program.
- (3) The permittee shall submit semiannual compliance reports to the MDEQ for the control of contaminants from scrap according to the requirements in 40 CFR 63.10(e). The report shall clearly identify any deviation from the requirements in Section 5.B of this permit and the corrective action taken. The permittee shall identify which compliance option in this permit applies to each scrap provider, contract, or shipment.

(Ref.: PSD Construction Permit Issued March 31, 2005 and August 27, 2007)

- 5.C.9 For Emission Point AA-030, the permittee must submit a Notification(s) of Performance Test for the thermal oxidizer and closed vent system at least 60 calendar days before the performance test(s) is(are) initially scheduled to begin to allow MDEQ, upon request, to review and approve the site-specific test plan and to have an observer present during the test. The notification for the closed vent system shall also include a site-specific monitoring plan, developed in accordance with Section 5 of this permit, which identifies the operating parameter(s) to be monitored to ensure that the 100% capture efficiency measured during the performance test is maintained. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). and 40 CFR 60.8)
- 5.C.10 For Emission Point AA-030, the permittee shall report the results of the performance test(s) to MDEQ within 60 days following the completion of the performance test(s). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.C.11 For Emission Point AA-030, the permittee shall include the following data in the initial compliance report required by 40 CFR 60.8(a):
 - (a) The overall VOC destruction rate used to attain compliance and the calculated emission limit used to attain compliance, and;
 - (b) The combustion temperature of the thermal oxidizer used to attain compliance

(Ref.: 40 CFR 60.465(b))

- 5.C.12 For Emission Point AA-030, the permittee shall include the following information in the semi-annual reports:
- (a) The identification of each coating, solvent, or other VOC/HAP containing material used;
 - (b) The VOC/HAP content(s) of each coating, solvent, or other VOC/HAP containing material used;
 - (c) The total gallons of each coating, solvent, or other VOC/HAP containing material used in each consecutive 12-month period;
 - (d) The total VOC/HAP emission rate in tons per month and TPY for each consecutive 12-month period.
 - (e) All periods (during actual coating operations) in excess of 3 hours during which the average combustion temperature in the thermal oxidizer remained more than 28 °C (50 °F) below the temperature at which compliance with Section 3 of this permit was demonstrated.
 - (f) All deviations from the monitoring requirements and/or operating parameters being monitored in accordance with the conditions of this permit, along with an explanation as to the cause and a description of corrective actions taken.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c), 40 CFR 60.7(c) and 40 CFR 60.465(d))

- 5.C.13 For Emission Point AA-017b, the permittee shall report the results of the NO_x performance test(s) to MDEQ within 60 days following the completion of the performance test(s). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c))
- 5.C.14 For Emission Points AA-017a and AA-017b, the permittee shall submit semiannual reports by July 31st and January 31st for the preceding six-month period of the combined NO_x emission rate in tons per year, as determined for each consecutive 12-month period, for demonstrating compliance with Condition 3.B.74. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))
- 5.C.15 For Emission Points AC-017a, AC-017b, and AC-017c, the permittee shall submit semiannual reports showing the fuel usage on a monthly and rolling, consecutive 12-month basis. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))
- 5.C.16 For Emission Point AA-029, the permittee shall submit annual reports showing the annual hours on a calendar year basis that the gas stream from the ATR bypassed the waste gas burner of Emission Point AA-027 and vented directly to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://ecfr.gpoaccess.gov> under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations,

persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:
- (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used in this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61
	or
	National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

LIST OF REGULATIONS REFERENCED IN PERMIT

The full text of the regulations referenced in this permit may be found on-line at <http://www.deq.state.us.us> and <http://ecfr.gpoaccess.gov>, or the Mississippi Department of Environmental Quality (MDEQ) will provide a copy upon request. A list of regulations referenced in this permit is shown below:

11 Miss. Admin. Code Pt. 2, Ch. 1, Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended December 14, 2011)

11 Miss. Admin. Code Pt. 2, Ch. 6, Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Air Emissions Operating Permit Regulations for the Purpose of Title V of the Federal Clean Air Act (Amended December 14, 2011)

40 CFR Part 82 - Title VI of the Clean Air Act (Stratospheric Ozone Protection)

40 CFR Part 60, Subpart A – General Provisions

40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 60, Subpart AAa – Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

40 CFR Part 60, Subpart TT – Standards of Performance for Metal Coil Surface Coating

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR Part 63, Subpart A – General Provisions

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR Part 63, Subpart YYYYYY - National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

APPENDIX C
COMPLIANCE ASSURANCE MONITORING PLAN

APPENDIX D
METAL SCRAP MANAGEMENT PLAN