STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AUTHORITY

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Aluminum Dynamics, LLC 3413 Charleigh D. Ford Jr. Drive Columbus, Lowndes County, Mississippi

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: July 7, 2023

Permit No.: 1680-00086

SECTION 1. GENERAL CONDITIONS

1.1 This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)

1.2 Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29(1)(b)

1.3 The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(5).)

1.4 It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)

1.5 The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(7).)

1.6 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(a).)

1.7 The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(b).)

1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(c).)

1.9 The permittee shall furnish to the Mississippi Department of Environmental Quality (MDEQ) within a reasonable time any information the MDEQ 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 MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(d).)

1.10 *Design and Construction Requirements*: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations (without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards) and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.(1) – (3).)

1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2).)

1.12 *Fugitive Dust Emissions from Construction Activities*: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.(4).)

- 1.13 *General Nuisance Clause*: The permittee shall not cause or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
 - (a) The permittee shall not cause the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

(b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of this permit, the MDEQ may order such corrected in a way that all air and gases or air and gas-borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

- 1.14 *Right of Entry*: The permittee shall allow the MDEQ Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - (a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
 - (b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions.

(Ref.: Miss. Code Ann. 49-17-21)

- 1.15 *Permit Modification or Revocation*: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:
 - (a) Persistent violation of any of the terms or conditions of this permit;
 - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

1.16 *Public Record and Confidential Information*: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the MDEQ Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

1.17 *Permit Transfer*: This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.18 *Severability*: The provisions of this permit are severable. If any provision of the permit (or the application of any provision of the permit to any circumstances) is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof (or their application to other persons or sets of circumstances) shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.(7).)

1.19 *Permit Expiration*: The Permit to Construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for at least eighteen (18) months, or if construction is not completed within a reasonable time. The MDEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(1)., R. 2.5.C.(4)., and R. 5.2.)

1.20 *Certification of Construction*: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(3).)

1.21 *Beginning Operation*: After certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Operating Permit or the application for issuance or modification of the State Permit to Operate (whichever is applicable) is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by Mississippi Administrative Code, Part 2, Title 11, Chapter 2, Rule 2.13.G.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(4).)

1.22 Application for a Permit to Operate: The application for issuance or modification of the State Permit to Operate or the Title V Operating Permit (whichever is applicable) is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(5).)

1.23 *Operating Under a Permit to Construct*: Upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Operating Permit (whichever is applicable), the applicant may continue to operate under the terms

and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(6).)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, 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 five (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 non-compliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than twenty-four (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) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.25 *General Duty*: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

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

- 1.26 *Compliance Testing*: Regarding compliance testing:
 - (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations of this permit and in units of mass per time.
 - (b) Compliance testing will be performed at the expense of the permittee.
 - (c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) Detailed description of testing procedures;
 - (2) Sample calculation(s);
 - (3) Results; and
 - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B.(3), (4), and (6).)

SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and/or modify and operate, upon certification of construction, air emissions equipment, as described in the following table:

Facility Operation	Emission Point	Description	
	AA-000	Facility-Wide [Aluminum Dynamics, LLC]	
	AA-001	No. 1 Melting Furnace [95.5 MMBTU / hour natural gas-fired furnace equipped with four (4) regenerative burners; emissions routed to Filter House No. 1 for control]	
	AA-002	No. 1 Holding Furnace with Dedicated Rotary Gas / Flux Injectors [20.0 MMBTU / hour natural gas-fired furnace equipped with two (2) burners; emissions routed to Filter House No. 1 for control]	
No. 1 Melting and Casting	AA-003	No. 1 In-Line Degasser [emissions routed to Filter House No. 1 for control]	
Line	AA-004	Filter House No. 1 [high-efficiency, alkaline reagent-injected baghouse]	
	AA-005	No. 1 Trough Heater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]	
	AA-006	No. 1 Filter Box Preheater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO_X burners]	
	AA-007	No. 2 Melting Furnace [95.5 MMBTU / hour natural gas-fired furnace equipped with four (4) regenerative burners; emissions routed to Filter House No. 2 for control]	
	AA-008	No. 2 Holding Furnace with Dedicated Rotary Gas / Flux Injectors [20.0 MMBTU / hour natu gas-fired furnace equipped with two (2) burners; emissions routed to Filter House No. 2 for contr	
No. 2 Melting and Casting	AA-009	No. 2 In-Line Degasser [emissions routed to the Filter House No. 2 for control]	
Line	AA-010	Filter House No. 2 [high-efficiency, alkaline reagent-injected baghouse]	
	AA-011	No. 2 Trough Heater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]	
	AA-012	No. 2 Filter Box Preheater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]	
	AA-013	No. 3 Melting Furnace [95.5 MMBTU / hour natural gas-fired furnace equipped with four (4) regenerative burners; emissions routed to the Filter House No. 3 for control]	
	AA-014	No. 3 Holding Furnace with Dedicated Rotary Gas / Flux Injectors [20.0 MMBTU / hour natural gas-fired furnace equipped with two (2) burners; emissions routed to Filter House No. 3 for control]	
No. 3 Melting and Casting	AA-015	No. 3 In-Line Degasser [emissions routed to Filter House No. 3 for control]	
Line	AA-016	Filter House No. 3 [high-efficiency, alkaline reagent-injected baghouse]	
	AA-017	No. 3 Trough Heater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]	
	AA-018	No. 3 Filter Box Preheater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]	

Facility Operation	Emission Point	Description				
	AA-019	No. 4 Melting Furnace [95.5 MMBTU / hour natural gas-fired furnace equipped with four (4) regenerative burners; emissions routed to Filter House No. 4 for control]				
	AA-020	No. 4 Holding Furnace with Dedicated Rotary Gas / Flux Injectors [20.0 MMBTU / hour natu gas-fired furnace equipped with two (2) burners; emissions routed to Filter House No. 4 for contra				
No. 4 Melting and Casting	AA-021	No. 4 In-Line Degasser [emissions routed to Filter House No. 4 for control]				
Line	AA-022	Filter House No. 4 [high-efficiency, alkaline reagent-injected baghouse]				
	AA-023	No. 4 Trough Heater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]				
	AA-024	No. 4 Filter Box Preheater [2.0 MMBTU / hour natural gas-fired heater equipped with low-NO _X burners]				
Melting and Casting Lines	AA-025	No. 1 Sow Dryer [29.3 MMBTU / hour natural gas-fired dryer / preheater; equipped with low-NO _X burners]				
Pretreatment	AA-026	No. 2 Sow Dryer [29.3 MMBTU / hour natural gas-fired dryer / preheater; equipped with low-NO _X burners]				
Melting and Casting Product Recovery	AA-027	Dross House [emissions controlled by the Dross House Baghouse]				
	AA-028	No. 1 Ingot Single Band Saw				
	AA-029	No. 1 Ingot Scalper [emissions controlled by a Scalper Filtration Unit (baghouse)]				
	AA-030	No. 1 Pusher Furnace [95.3 MMBTU / hour natural gas-fired furnace with low-NO _X burners and heat recuperators (for combustion air preheating)]				
	AA-031	No. 2 Pusher Furnace [95.3 MMBTU / hour natural gas-fired furnace with low-NO _X burners and heat recuperators]				
	AA-032	No. 3 Pusher Furnace [95.3 MMBTU / hour natural gas-fired furnace with low-NO _X burners and heat recuperators]				
Hot Rolling Mill (HR)	AA-033	No. 4 Pusher Furnace [95.3 MMBTU / hour natural gas-fired furnace with low-NO _X burners and heat recuperators]				
	AA-034	No. 5 Pusher Furnace [95.3 MMBTU / hour natural gas-fired furnace with low-NO _X burners and heat recuperators]				
	AA-035	Single-Stand Hot Roughing (Reversing) Mill [an Exhaust Capture and Collection System (ECCS) routes emissions to HR Mist Eliminator No. 1]				
	AA-036	Roughing Mill Main Emulsion Storage Tank				
	AA-037	Roughing Mill Base Oil Storage Tank				
	AA-038	Four-Stand Hot Finishing Mill [an ECCS routes emissions to HR Mist Eliminator No. 2]				

Facility Operation	Emission Point	Description				
Hot Rolling	AA-039	Finishing Mill Main Emulsion Storage Tank				
Mill (HR)	AA-040	Finishing Mill Base Oil Storage Tank				
	AA-041	Six-High, Two-Stand Tandem Cold Mill (TCM) No. 1 [an ECCS routes emissions controlled by Heavy Oil Scrubber No. 1]				
	AA-042	Six-High, Single-Stand Cold Rolling Mill (CRM) No. [an ECCS routes emissions controlled by Heavy Oil Scrubber No. 1]				
	AA-043	Six-High, Two-Stand TCM No. 2 [an ECCS routes emissions controlled by Heavy Oil Scrubber No. 2]				
	AA-044	No. 1 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 1 Annealing Furnace Stack]				
	AA-045	No. 2 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 1 Annealing Furnace Stack]				
	AA-046	No. 3 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 1 Annealing Furnace Stack]				
Cold Rolling Mill	AA-047	No. 4 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 1 Annealing Furnace Stack]				
	AA-048	No. 5 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 1 Annealing Furnace Stack]				
	AA-049	No. 6 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with a heat recuperator and low-NO _X burners; emissions routed to the No. 2 Annealing Furnace Stack]				
	AA-050	No. 7 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with heat recuperator an low-NO _X burners; emissions routed to the No. 2 Annealing Furnace Stack]				
	AA-051	No. 8 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with heat recuperator and low-NO _X burners; emissions routed to the No. 2 Annealing Furnace Stack]				
	AA-052	No. 9 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with heat recuperator and low-NO _X burners; emissions routed to the No. 2 Annealing Furnace Stack]				
	AA-053	No. 10 Annealing Furnace [8.2 MMBTU / hour natural gas-fired furnace with heat recuperator and low-NO _X burners; emissions routed to the No. 2 Annealing Furnace Stack]				
	AA-054	No. 1 Alkaline Cleaning Operation [emissions controlled by CASH Mist Eliminator No. 1]				
No. 1 Continuous	AA-055	No. 1 Heat Treat Furnace [41.02 MMBTU / hour natural gas-fired furnace]				
Anneal and Solution Heat	AA-056	No. 1 Pickling Operation [emissions controlled by CASH Wet Scrubber No. 1]				
Treatment (CASH) Line	AA-057	No. 1 Post-Treatment Operation [emissions controlled by CASH Wet Scrubber No. 1]				
	AA-058	No.1 Reheater Furnace [7.69 MMBTU / hour natural gas-fired furnace]				

Facility Operation	Emission Point	Description			
No. 1 CASH Line	AA-059	No. 1 Electrostatic Lubing			
	AA-060	No. 2 Alkaline Cleaning Operation [emissions controlled by CASH Mist Eliminator No. 2]			
	AA-061	No. 2 Heat Treat Furnace [41.02 MMBTU / hour natural gas-fired furnace]			
No. 2 CASH	AA-062	No. 2 Pickling Operation [emissions controlled by CASH Wet Scrubber No. 2]			
Line	AA-063	No. 2 Post-Treatment Operation [emissions controlled by CASH Wet Scrubber No. 2]			
	AA-064	No. 2 Reheater Furnace [7.69 MMBTU / hour natural gas-fired furnace]			
	AA-065	No. 2 Electrostatic Lubing			
	AA-066	No. 1 Alkaline Pre-Cleaning Operation [emissions controlled by CCL Wet Scrubber No. 1]			
	AA-067	No. 1 Tension Leveler			
No. 1 Coil Coating Line	AA-068	No. 1 Alkaline and Acidic Cleaning Operation [emissions controlled by CCL Wet Scrubber No. 2]			
(CCL No. 1)	AA-069	No. 1 Pre-Treatment Chemical Dryer / Air Cooler [4.09 MMBTU / hour natural gas-fired dryer]			
	AA-070	No. 1 Coil Coating Process [includes a finish dryer/oven; emissions controlled by a regenerative thermal oxidizer (RTO); combined maximum heat input (dryer burners and RTO): 24.6 MMBT hour]			
	AA-071	Auxiliary Boiler [16.8 MMBTU / Hour Natural Gas-Fired Auxiliary Boiler [unit creates processeam and hot water]			
	AA-072	No. 1 Cooling Tower [flow rate: 15,100 gallons / minute]			
	AA-073	No. 2 Cooling Tower [flow rate: 12,500 gallons / minute]			
	AA-074	No. 3 Cooling Tower [flow rate: 10,000 gallons / minute]			
Auxiliary	AA-075	No. 4 Cooling Tower [flow rate: 15,500 gallons / minute]			
Systems	AA-076	1,250 kW (1,711 HP; 11.97 MMBTU / hour) Diesel-Fired Emergency Generator Engine No. 1 [manufactured in or after 2021]			
	AA-077	1,250 kW (1,711 HP; 11.97 MMBTU / hour) Diesel-Fired Emergency Generator Engine No. 2 [manufactured in or after 2021]			
	AA-078	1,250 kW (1,711; HP; 11.97 MMBTU / hour) Diesel-Fired Emergency Generator Engine No. 3 [manufactured in or after 2021]			
	AA-079	261 kW (350 HP; 2.21 MMBTU / hour) Diesel-Fired Fire Pump Engine No. 1 [manufactured in or after 2021]			

Facility Operation	Emission Point	Description
Auxiliary Systems	AA-080	Paved Haul Roads [fugitive]

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity (from smoke)	· ≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a) and (b).	3.3	PM (filterable)	0.6 lb. / MMBTU per Hour; or $E = 0.8808 (I^{-0.1667})$ (for fossil fuel combustion)
	11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1).	3.4	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$ (for manufacturing / industrial processes)
AA-001 through AA-004 AA-007 through AA-010 AA-013 through AA-016 AA-019 through AA-022	40 CFR Part 63, Subpart RRR – NESHAP for Secondary Aluminum Production 40 CFR 63.1500(a); Subpart RRR	3.5	PM Dioxin / Furan (D/F) [Group 1 Furnaces Only] HCl Opacity [COM Option Only]	General Applicability
AA-001 through AA-003 AA-007 through AA-009 AA-013 through AA-015 AA-019 through AA-021	40 CFR 63.1505(k)(1) – (4); Subpart RRR	3.6	PM HCl D/F [Group 1 Furnaces Only]	Commonly-Ducted Emission Limits (3-Day, 24-Hour Rolling Average)
AA-001 AA-002 AA-007 AA-008 AA-013 AA-014	40 CFR 63.1505(i)(1), (3), and (4) – (6); Subpart RRR	3.7	PM HCl D/F TEQ	0.40 lb. / ton (each pollutant) 2.1×10 ⁻⁴ grains / ton
AA-014 AA-019 AA-020			Opacity [COM Option Only]	10%

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
			HCl	0.04 lb. / ton
AA-003 AA-009 AA-015	40 CFR 63.1505(j)(1), (2), (4), and (5); Subpart RRR	3.8	РМ	0.01 lb. / ton
AA-021			Opacity [COM Option Only]	10%
			PM (filterable)	1.68 lb. / hour, not to exceed 0.043 lb. / ton
			PM ₁₀ (filterable + condensable)	1.97 lb. / hour, not to exceed 0.049 lb. / ton
AA-004 AA-010	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	2.0	PM _{2.5} (filterable + condensable)	1.85 lb. / hour, not to exceed 0.047 lb. / ton
AA-016 AA-022	(PSD Air Quality Limits)	3.9	VOCs (as propane)	6.71 lb. / hour, not to exceed 0.174 lb. / ton
			СО	9.24 lb. / hour, not to exceed 0.237 lb. / ton
			NO _X	14.08 lb. / hour, not to exceed 0.356 lb. / ton
AA-005 AA-006 AA-011 AA-012 AA-017 AA-018 AA-023 AA-024	 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limit) 	3.10	NO _X	74.98 lb. / MMscf
AA-025	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)		NO _X	50.0 lb. / MMscf
AA-026	(PSD Air Quality Limits)	3.11	СО	76.07 lb. / MMscf
			PM (filterable)	0.002 grains / dscf
AA-027	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.12	PM ₁₀ (filterable only)	0.61 lb. / hour
	(PSD Air Quality Limits)		PM _{2.5} (filterable only)	0.51 lb. / hour
AA-029	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.13	PM (filterable)	0.002 grains / dscf
	(PSD Air Quality Limits)			~

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-029	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.13	PM ₁₀ (filterable only)	0.56 lb. / hour
AA-027	(PSD Air Quality Limits)	5.15	PM _{2.5} (filterable only)	0.18 lb. / hour
	11 Miss. Admin. Code Pt. 2, Ch. 5.		NO _X	140.69 lb. / MMscf
AA-030 through AA-034	and 40 CFR 52.21(j), (k) (PSD Air Quality Limits)	3.14	СО	68.51 lb. / MMscf
	(PSD BACT Limit)		Max. Natural Gas Usage	833.0 MMscf / Year (All Furnaces Combined) (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.15	Max. Aluminum Throughput	1,213,513.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limits)	3.16	PM (filterable)	0.0031 grains / acf, not to exceed 0.017 lb. / ton
AA-035			PM ₁₀ (filterable + condensable)	7.54 lb. / hour, not to exceed 0.024 lb. / ton
			PM _{2.5} (filterable + condensable)	7.31 lb. / hour, not to exceed 0.023 lb. / ton
			VOCs (as propane)	27.56 lb. / hour, not to exceed 0.086 lb. / ton
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.17	Max. Aluminum Throughput	1,176,639.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)		PM (filterable)	0.0031 grains / acf, not to exceed 0.033 lb. / ton
AA-038			PM ₁₀ (filterable + condensable)	14.01 lb. / hour, not to exceed 0.045 lb. / ton
	(PSD Air Quality Limits)	3.18	PM _{2.5} (filterable + condensable)	13.58 lb. / hour, not to exceed 0.044 lb. / ton
			VOCs (as propane)	41.12 lb. / hour, not to exceed 0.133 lb. / ton
AA-041	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.19	PM (filterable)	0.0025 grains / scf, not to exceed 4.08 lb. / hour
AA-042	(PSD Air Quality Limits)		PM ₁₀ (filterable + condensable)	0.0038 grains / scf, not to exceed 6.12 lb. / hour

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-041	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.19	PM _{2.5} (filterable + condensable)	0.0033 grains / scf, not to exceed 5.32 lb. / hour
AA-042	(PSD Air Quality Limits)	5.17	VOCs (as propane)	26.24 lb. / hour
			PM (filterable)	0.0025 grains / scf, not to exceed 2.88 lb. / hour
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	2.20	PM ₁₀ (filterable + condensable)	0.0038 grains / scf, not to exceed 4.32 lb. / hour
AA-043	(PSD Air Quality Limits)	3.20	PM _{2.5} (filterable + condensable)	0.0033 grains / scf, not to exceed 3.76 lb. / hour
			VOCs (as propane)	18.52 lb. / hour
AA-044 through AA-053 AA-071	40 CFR Part 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63.7485, 63.7490(a)(2), (b), 63.7499(1), and 63.7575; Subpart DDDDD	3.21	СО	General Applicability
			NO _X	211.04 lb. / MMscf
AA-044 through AA-053	 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), (k) (PSD Air Quality Limits) (PSD BACT Limit) 	3.22	СО	68.51 lb. / MMscf
			Max. Natural Gas Usage	345.0 MMscf / Year (All Furnaces Combined) (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.23	Max. Strip Area Throughput	1,558,956.0 Mft ² Aluminum / Year (Combined) (Rolling 12-Month Total)
AA-054		3.24	PM (filterable)	0.0037 grains / acf
AA-060	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limits)		PM ₁₀ / PM _{2.5} (filterable + condensable)	0.0037 grains / acf (each pollutant)
			VOCs (as propane)	0.32 lb. / hour

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
	11 Miss. Admin. Code Pt. 2, Ch. 5.		NO _X	119.59 lb. / MMscf
AA-055 AA-061	and 40 CFR 52.21(j), (k) (PSD Air Quality Limits)	3.25	СО	68.51 lb. / MMscf
	(PSD BACT Limit)		Max. Natural Gas Usage	209.4 MMscf / Year (All Furnaces Combined) (Rolling 12-Month Total)
			PM (filterable)	0.0037 grains / acf, not to exceed 0.0038 lb. / Mft ²
AA-056	11 Miss. Admin. Code Pt. 2, Ch. 5.	3.26	PM ₁₀ / PM _{2.5} (filterable + condensable)	0.0037 grains / acf, not to exceed 0.0038 lb. / Mft ² (each pollutant)
AA-057 AA-062 AA-063	and 40 CFR 52.21(k) (PSD Air Quality Limits)		VOCs (as propane)	0.16 lb. / hour, not to exceed 0.001 lb. / Mft^2
			HF	0.0015 grains / acf, not to exceed 0.0015 lb. / Mft ²
			H_2SO_4	0.0026 grains / acf, not to exceed 0.0027 lb. / Mft ²
	 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limits) (PSD BACT Limit) 	3.27	NO _X	70.35 lb. / MMscf
AA-058 AA-064			СО	68.51 lb. / MMscf
			Max. Natural Gas Usage	33.6 MMscf / Year (All Furnaces Combined) (Rolling 12-Month Total)
AA-066 AA-068	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.28	Max. Strip Area Throughput	1,690,675.0 Mft ² Aluminum / Year (Each Operation) (Rolling 12-Month Total)
			PM (filterable)	0.0038 grains / acf
AA-066	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limits)	3.29	PM ₁₀ / PM _{2.5} (filterable + condensable)	0.0038 grains / acf (each pollutant)
			VOCs (as propane)	0.39 lb. / hour
AA-067	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.30	VOCs (from lubricant)	4.83 tpy (Rolling 12-Month Total)

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)		PM (filterable)	0.0038 grains / acf, not to exceed 0.0011 lb. / Mft ²
		2.21	PM ₁₀ / PM _{2.5} (filterable + condensable)	0.0038 grains / acf, not to exceed 0.0011 lb. / Mft ² (each pollutant)
AA-068	(PSD Air Quality Limits)	3.31	VOCs (as propane)	0.11 lb. / hour, not to exceed 0.0004 lb. / Mft^2
			HF H ₂ SO ₄	0.31 lb. / hour, not to exceed 0.0011 lb. / Mft ² (each pollutant)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Limit)	3.32	Max. Coil Coating Throughput	95,341.0 tpy (Rolling 12-Month Total)
		3.33	PM (filterable)	2.74 lb. / hour, not to exceed 0.174 lb. / ton
	 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) (PSD Air Quality Limits) 		PM ₁₀ (filterable + condensable)	2.49 lb. / hour, not to exceed 0.163 lb. / ton
			PM _{2.5} (filterable + condensable)	2.06 lb. / hour, not to exceed 0.136 lb. / ton
			VOCs (as propane)	5.29 lb. / hour, not to exceed 0.348 lb. / ton
AA-070			NO _X	26.46 lb. / hour
			СО	13.23 lb. / hour
	40 CFR Part 60, Subpart TT – Standards of Performance for Metal Coil Surface Coating	3.34		General Applicability
	40 CFR 60.460; Subpart TT		VOCs	
	40 CFR 60.462(a)(3), Subpart TT	3.35		10% of the Total VOCs Applied (90% Emission Reduction)
				(Each Calendar Month)
	40 CFR Part 63, Subpart SSSS – NESHAP for Metal Coil Surface Coating	3.36	Organic HAPs	General Applicability
	40 CFR 63.5090(a), (e), 63.5140(c), and Table 2; Subpart SSSS			

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
	40 CFR 63.5120(a); Subpart SSSS	3.37		Emission Standard Options
AA-070	40 CFR 63.5121(a) and Table 1; Subpart SSSS	3.38	Organic HAPs	Maintain Operating Limits
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k)	3.39	NO _X	11.2 lb. / MMscf
	(PSD Air Quality Limits)	3.37	СО	38.0 lb. / MMscf
AA-071	40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60.40c(a); Subpart Dc	3.40	PM SO ₂	General Applicability
		3.41	PM (filterable)	0.13 lb. / MMgal
AA-072 through AA-075	11 Miss. Admin. Code Pt. 2, Ch. 5.and 40 CFR 52.21(k)(PSD Air Quality Limits)		PM ₁₀ (filterable and condensable)	0.009 lb. / MMgal
			PM _{2.5} (filterable and condensable)	1.28×10 ⁻⁴ lb. / MMgal
	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2); Subpart IIII	3.42	NO _X + NMHC CO PM	General Applicability
AA-076 through AA-079	40 CFR 60.4207(b); Subpart IIII	3.43	Fuel Requirement	 15 ppm Sulfur Content (Max.) 40 Cetane Index (Min.) or 35% Aromatic Content (Max. – by volume)
	40 CFR 60.4211(f)(1) – (3); Subpart IIII	3.44	Operational Requirements	 100 Hours / Calendar Year for Maintenance and Readiness Testing; 50 Hours / Calendar Year for Non- Emergency Situations
			NO _X + NMHC	6.4 grams / kilowatt-hour
AA-076 AA-077 AA-078	40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII	3.45	СО	3.5 grams / kilowatt-hour
	Table 2 in Appendix I; Part 1039		РМ	0.20 grams / kilowatt-hour

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-076 AA-077 AA-078	40 CFR 60.4202(a)(2) and 60.4205(b); Subpart IIII 40 CFR 1039.105; Subpart B	3.46	Opacity (Smoke)	20% During Acceleration Mode15% During Lugging Mode50% During Peaks in EitherAcceleration or Lugging Modes
AA-079	40 CFR 60.4205(c), 60.4206, and Table 4; Subpart IIII	3.47	$NO_X + NMHC$	4.0 grams / kilowatt-hour
			СО	3.5 grams / kilowatt-hour
			РМ	0.20 grams / kilowatt-hour
	40 CFR Part 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6585(a), (b), 63.6590(b)(1)(i), and (c)(7); Subpart ZZZZ	3.48	HAPs	General Applicability

- 3.1 For Emission Point AA-000 (Facility-Wide), unless otherwise specified or limited herein, the permittee shall not cause or allow the emission of smoke into the open air from a point source or from any manufacturing / industrial process on-site that exceeds forty (40) percent opacity subject to the following exceptions:
 - (a) Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups 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 sixty (60) percent opacity and provided further that the aggregation 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 (1) one hour.

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

3.2 For Emission Point AA-000 (Facility-Wide), the permittee shall not discharge into the ambient air from a point source any contaminant of such opacity as to obscure an observer's view to a degree in excess of forty (40) percent opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

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

- 3.3 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall comply with the following ash / PM emission limits (as applicable):
 - (a) For any unit that combusts a fossil fuel and has a maximum heat input of less than ten (10) million BTU (MMBTU) per hour, the permittee shall not exceed 0.6 pounds per MMBTU per hour heat input; or
 - (b) For any unit that combust a fossil fuel and has a maximum heat input equal to / greater than 10 MMBTU per hour but less than 10,000 MMBTU per hour, the permittee shall not exceed an emission rate as determined by the following relationship:

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

Where "*E*" is the emission rate in pounds per MMBTU per hour heat input and "*I*" is the heat input in MMBTU per hour.

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

3.4 For Emission Point AA-000 (Facility-Wide), unless otherwise specified or limited herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combinations thereof) to exceed the amount determined by the relationship:

$$E = 4.1 \cdot (p^{0.67})$$

Where "E" is the emission rate in pounds per hour and "p" is the process weight input rate in tons per hour. Conveyer discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

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

3.5 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63; Subpart RRR – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production and 40 CFR Part 63; Subpart A – General Provisions (as required by Appendix A in Subpart RRR).

(Ref.: 40 CFR 63.1500(a); Subpart RRR)

3.6 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall comply with the following limits for each secondary aluminum processing unit (i.e. each corresponding melting furnace, holding furnace, and in-line degasser) as calculated by the corresponding equations on a 3-day, 24-hour rolling average basis:

(a) *For Particulate Matter (PM)*:

$$L_{C,PM} = \frac{\sum_{i=1}^{n} [(L_{t,i(PM)})(T_{t,i})]}{\sum_{i=1}^{n} (T_{t,i})}$$

Where:

- $L_{C,PM}$ = The daily PM emission limit for a secondary aluminum processing unit to be used to calculate the 3-day, 24-hour PM emission limit, in pounds per ton of feed / charge;
- $L_{t,i(PM)}$ = The PM emission limit specified in Condition 3.7(a) or 3.8(b) (as applicable) for unit "*i*", in pounds per ton of feed / charge; and
- $T_{t,i}$ = The mass of feed / charge for twenty-four (24) hours for unit "*i*"; and
- n = The number of units in the secondary aluminum processing unit.
- (b) *For Hydrogen Chloride (HCl)*:

$$L_{C,HCl} = \frac{\sum_{i=1}^{n} [(L_{t,i(HCl)})(T_{t,i})]}{\sum_{i=1}^{n} (T_{t,i})}$$

Where:

- $L_{C,HCl/HF}$ The daily HCl emission limit for a secondary aluminum process to be used to calculate the 3-day, 24-hour HCl emission limit, in pounds per ton of feed / charge;
- $L_{t,i(HCl/HF)}$ = The HCl emission limit specified in Condition 3.7(c) or Condition 3.8(a) (as applicable) for unit "*i*", in pounds per ton of feed / charge; and
- $T_{t,i}$ = The mass of feed / charge for twenty-four (24) hours for unit "i"; and
- n = The number of units in the secondary aluminum processing unit.
- (c) *For Dioxins and Furans (D/F)*: [Group 1 Furnaces Only]

$$L_{C,D/F} = \frac{\sum_{i=1}^{n} [(L_{t,i(D/F)})(T_{t,i})]}{\sum_{i=1}^{n} (T_{t,i})}$$

Where:

- $L_{C,D/F}$ = The daily D/F emission limit for a secondary aluminum process to be used to calculate the 3-day, 24-hour D/F emission limit, in pounds per ton of feed / charge;
- $L_{t,i(D/F)}$ = The D/F emission limit specified in Condition 3.7(b) (as applicable) for unit "*i*", in pounds per ton of feed / charge; and
- $T_{t,i}$ = The mass of feed / charge for twenty-four (24) hours for unit "i"; and

n = The number of units in the secondary aluminum process.

In lieu of complying with the limits calculated by the specified equations, the permittee may comply with the emission limits specified in Condition 3.7(a) - (c) or Condition 3.8(a) - (b) (as applicable) for each individual process unit.

(Ref.: 40 CFR 63.1505(k)(1) – (4) and 63.1513(f); Subpart RRR)

- 3.7 For Emission Points AA-001, AA-002, AA-007, AA-008, AA-013, AA-014, AA-019, and AA-020, the permittee shall at all times (including periods of start-up and shutdown) comply with the following emission limits:
 - (a) PM: no more than 0.40 pounds per ton of "feed / charge" (i.e. the total weight of material and alloying agents entering the furnace);
 - (b) Dioxins and Furans (D/F) TEQ: no more than 2.1×10^{-4} grains per ton of feed / charge;

For the purpose of this permit, "TEQ" is the international method of expressing toxicity equivalents for dioxins and furans as defined in the "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update".

- (c) Hydrogen Chloride (HCl): no more than 0.40 pounds per ton of feed / charge; and
- (d) Opacity: no more than ten (10) percent (if a COMS is chosen as the monitoring option).

For the purpose of this condition, the permittee may apply the denoted emission limits on the basis of the aluminum production weight rather than on the basis of feed / charge.

(Ref.: 40 CFR 63.1505(a), (i)(1), (3), and (4) – (6); Subpart RRR)

- 3.8 For Emission Points AA-003, AA-009, AA-015, and AA-021, the permittee shall at all times (including periods of start-up and shutdown) comply with the following emission limits:
 - (a) HCl: no more than 0.04 pounds per ton of feed / charge;
 - (b) PM: no more than 0.01 pounds per ton of feed / charge; and

(c) Opacity: no more than ten (10) percent (if a COM is chosen as the monitoring option).

For the purpose of this condition, the permittee may apply the denoted emission limits on the basis of the aluminum production weight rather than on the basis of feed / charge. Additionally, the limits specified in paragraphs (a) and (b) are not applicable to any in-line fluxer that does not use reactive flux materials.

(Ref.: 40 CFR 63.1505(j)(1), (2), (4), and (5); Subpart RRR)

- 3.9 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall comply with the following emission limits from each "Filter House" (based on a 3-hour average):
 - (a) PM (filterable): no more than 1.68 pounds per hour and not to exceed 0.043 pounds per ton of aluminum produced;
 - (b) Particulate Matter less than 10 microns in diameter (PM_{10} ; filterable and condensable): no more than 1.97 pounds per hour and not exceed to 0.049 pounds per ton of aluminum produced;
 - (c) Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$; filterable and condensable): no more than 1.85 pounds per hour and not to exceed 0.047 pounds per ton of aluminum produced;
 - (d) Volatile Organic Compounds (VOCs as propane): no more than 6.71 pounds per hour and not exceed to 0.174 pounds per ton of aluminum produced;
 - (e) Carbon Monoxide (CO): no more than 9.24 pounds per hour and not to exceed 0.237 pounds per ton of aluminum produced; and
 - (f) Nitrogen Oxides (NO_X): no more than 14.08 pounds per hour and not to exceed 0.356 pounds per ton of aluminum produced.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21 (k) – PSD Air Quality Limits)

3.10 For Emission Points AA-005, AA-006, AA-011, AA-012, AA-017, AA-018, AA-023, and AA-024, the permittee shall utilize low-NO_X burners to limit the emission of NO_X from each heater to no more than 74.98 pounds per MMscf of natural gas combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.11 For Emission Points AA-025 and AA-026, the permittee shall utilize low-NO_X burners to limit the emission of NO_X from each dryer to no more than 50.0 pounds per MMscf of natural gas combusted. Additionally, the permittee shall limit the emission of CO to no more than 76.07 pounds per MMscf of natural gas combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

- 3.12 For Emission Point AA-027, the permittee shall utilize the "Dross House Baghouse" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.002 grains per dry standard cubic foot (dscf) of exhaust air;
 - (b) PM_{10} (filterable only): no more than 0.61 pounds per hour; and
 - (c) $PM_{2.5}$ (filterable only): no more than 0.51 pounds per hour.

- 3.13 For Emission Point AA-029, the permittee shall utilize the "Scalper Filtration Unit" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more 0.002 grains per dscf of exhaust air;
 - (b) PM_{10} (filterable only): no more than 0.56 pounds per hour; and
 - (c) $PM_{2.5}$ (filterable only): no more than 0.18 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

- 3.14 For Emission Points AA-030 through AA-034, the permittee shall comply with the following limits:
 - (a) The permittee shall utilize low-NO_X burners to limit the emission of NO_X from each furnace to no more than 140.69 pounds per MMscf of natural gas combusted;
 - (b) The permittee shall limit the emission of CO from each furnace to no more than 68.51 pounds per MMscf of natural gas combusted; and
 - (c) The permittee shall limit the total volume of natural gas combusted within all furnaces combined to no more than 833.0 MMscf per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), (k) – PSD BACT Limit and PSD Air Quality Limits)

3.15 For Emission Point AA-035, the permittee shall limit the total quantity of aluminum processed to no more than 1,213,513.0 tons per year (tpy) based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Limit)

3.16 For Emission Point AA-035, the permittee shall utilize the "HR Mist Eliminator No. 1" to comply with the following emission limits (based on a 3-hour average):

- (a) PM (filterable): no more than 0.0031 grains per actual cubic foot (acf) of exhaust air and not to exceed 0.017 pounds per ton of aluminum processed;
- (b) PM_{10} (filterable and condensable): no more than 7.54 pounds per hour and not to exceed 0.024 pounds per ton of aluminum processed;
- (c) $PM_{2.5}$ (filterable and condensable): no more than 7.31 pounds per hour and not to exceed 0.023 pounds per ton of aluminum processed; and
- (d) VOCs (as propane): no more than 27.56 pounds per hour and not to exceed 0.086 pounds per ton of aluminum processed.

3.17 For Emission Point AA-038, the permittee shall limit the total quantity of aluminum processed to no more than 1,176.639.0 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Limit)

- 3.18 For Emission Point AA-038, the permittee shall utilize the "HR Mist Eliminator No. 2" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.0031 grains per acf of exhaust air and not to exceed 0.033 pounds per ton of aluminum processed;
 - (b) PM_{10} (filterable and condensable): no more than 14.01 pounds per hour and not to exceed 0.045 pounds per ton of aluminum processed;
 - (c) $PM_{2.5}$ (filterable and condensable): no more than 13.58 pounds per hour and not to exceed 0.044 pounds per ton of aluminum processed; and
 - (d) VOCs (as propane): no more than 41.12 pounds per hour and not to exceed 0.133 pounds per ton of aluminum processed.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

- 3.19 For Emission Points AA-041 and AA-042, the permittee shall utilize the "Heavy Oil Scrubber No. 1" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more 0.0025 grains per scf of exhaust air and not to exceed 4.08 pounds per hour;
 - (b) PM_{10} (filterable and condensable): no more 0.0038 grains per scf of exhaust air and not to exceed 6.12 pounds per hour;
 - (c) PM_{2.5} (filterable and condensable): no more 0.0033 grains per scf of exhaust air and not to exceed 5.32 pounds per hour; and
 - (d) VOCs (as propane): no more than 26.24 pounds per hour.

- 3.20 For Emission Point AA-043, the permittee shall utilize the "Heavy Oil Scrubber No. 2" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more 0.0025 grains per scf of exhaust air and not to exceed 2.88 pounds per hour;
 - (b) PM_{10} (filterable and condensable): no more 0.0038 grains per scf of exhaust air and not to exceed 4.32 pounds per hour;
 - (c) PM_{2.5} (filterable and condensable): no more 0.0033 grains per scf of exhaust air and not to exceed 3.76 pounds per hour; and
 - (d) VOCs (as propane): no more than 18.52 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.21 For Emission Points AA-044 through AA-053 and AA-071, the permittee is subject to and shall comply with 40 CFR Part 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 10 of Subpart DDDDD).

Emission Points AA-044 through AA-053 are classified under a subcategory of process heaters defined as "*metal process furnaces*". Additionally, Emission Point AA-071 is classified as a boiler under the "*units designed to burn gas 1 fuels*" subcategory.

(Ref.: 40 CFR 63.7485, 63.7490(a)(2), (b), 63.7499(l), and 63.7575; Subpart DDDDD)

- 3.22 For Emission Points AA-044 through AA-053, the permittee shall comply with the following limits:
 - (a) The permittee shall utilize low-NO_X burners to limit the emission of NO_X from each furnace to no more than 211.04 pounds per MMscf of natural gas combusted;
 - (b) The permittee shall limit the emission of CO from each furnace to no more than 68.51 pounds per MMscf of natural gas combusted; and
 - (c) The permittee shall limit the total volume of natural gas combusted within all furnaces combined to no more than 345.0 MMscf per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), (k) – PSD BACT Limit and PSD Air Quality Limits)

3.23 For Emission Points AA-054 and AA-060, the permittee shall limit the total combined area (i.e. one-sided strip surface area) of aluminum strip processed and/or cleaned to no more than 1,558,956.0 thousand square feet (Mft²) per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) - PSD BACT Limit)

- 3.24 For Emission Points AA-054 and AA-060, the permittee shall utilize the corresponding "CASH Mist Eliminator No. 1" and "CASH Mist Eliminator No. 2" to comply with the following emission limits for each cleaning operation (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.0037 grains per acf of exhaust air;
 - (b) PM_{10} (filterable and condensable) and $PM_{2.5}$ (filterable and condensable): no more than 0.0037 grains per acf of exhaust air for each pollutant; and
 - (c) VOCs (as propane): no more than 0.32 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

- 3.25 For Emission Points AA-055 and AA-061, the permittee shall comply with the following limits:
 - (a) The permittee shall utilize low-NO_X burners to limit the emission of NO_X from each furnace to no more than 119.59 pounds per MMscf of natural gas combusted;
 - (b) The permittee shall limit the emission of CO from each furnace to no more than 68.51 pounds per MMscf of natural gas combusted; and
 - (c) The permittee shall limit the total volume of natural gas combusted within all furnaces combined to no more than 209.0 MMscf per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), (k) – PSD BACT Limit and PSD Air Quality Limits)

- 3.26 For Emission Points AA-056, AA-057, AA-062, and AA-063, the permittee shall utilize the corresponding "CASH Wet Scrubber No. 1" and "CASH Wet Scrubber No. 2" to comply with the following emission limits for each combined pickling / post-treatment operation routed to the shared scrubbers (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.0037 grains per acf of exhaust air and not to exceed 0.038 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);
 - (b) PM₁₀ (filterable and condensable) and PM_{2.5} (filterable and condensable): no more than 0.0037 grains per acf of exhaust air and not to exceed 0.038 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);
 - (c) VOCs (as propane): no more than 0.16 pounds per hour and not to exceed 0.001 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);

- (d) HF: no more than 0.0015 grains per acf of exhaust air and not to exceed 0.0015 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area); and
- (e) Sulfuric Acid (H_2SO_4): no more than 0.0026 grains per acf of exhaust air and not to exceed 0.0027 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area).

- 3.27 For Emission Points AA-058 and AA-064, the permittee shall comply with the following limits:
 - (a) The permittee shall utilize low-NO_X burners to limit the emission of NO_X from each furnace to no more than 70.35 pounds per MMscf of natural gas combusted;
 - (b) The permittee shall limit the emission of CO from each furnace to no more than 68.51 pounds per MMscf of natural gas combusted; and
 - (c) The permittee shall limit the total volume of natural gas combusted within all furnaces combined to no more than 33.6 MMscf per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), (k) – PSD BACT Limit and PSD Air Quality Limits)

3.28 For Emission Points AA-066 and AA-068, the permittee shall limit the total area of aluminum strip processed and/or cleaned (one-sided strip surface area) by each operation to no more than 1,690,675.0 Mft² per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Limit)

- 3.29 For Emission Point AA-066, the permittee shall utilize the "CCL Wet Scrubber No. 1" to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.0038 grains per actual cubic foot of exhaust air;
 - (b) PM_{10} (filterable and condensable) and $PM_{2.5}$ (filterable and condensable): no more than 0.0038 grains per actual cubic foot of exhaust air; and
 - (c) VOCs (as propane): no more than 0.39 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.30 For Emission Point AA-067, the permittee shall limit the total emission of VOCs from all lubricants applied to no more than 4.83 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Limit)

- 3.31 For Emission Point AA-068, the permittee shall utilize the "CCL Wet Scrubber No. 2" comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more than 0.0038 grains per actual cubic foot of exhaust air and not to exceed 0.011 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);
 - (b) PM_{10} (filterable and condensable) and $PM_{2.5}$ (filterable and condensable): no more than 0.0038 grains per actual cubic foot of exhaust air and not to exceed 0.011 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);
 - (c) VOCs (as propane): no more than 0.11 pounds per hour and not to exceed 0.0004 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area);
 - (d) HF: no more than 0.31 pounds per hour and not to exceed 0.0011 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area); and
 - (e) H_2SO_4 : no more than 0.31 pounds per hour and not to exceed 0.0011 pounds per Mft² of aluminum strip processed / cleaned (one-sided strip surface area).

3.32 For Emission Point AA-070, the permittee shall limit the total quantity of aluminum coil coated to no more than 95,341.0 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Limit)

- 3.33 For Emission Point AA-070, the permittee shall utilize a regenerative thermal oxidizer (RTO) to comply with the following emission limits (based on a 3-hour average):
 - (a) PM (filterable): no more than 2.74 pounds per hour and not to exceed 0.174 pounds per ton of aluminum coil coated;
 - (b) PM_{10} (filterable and condensable): no more than 2.49 pounds per hour and not exceed to 0.163 pounds per ton of aluminum coil coated;
 - (c) PM_{2.5} (filterable and condensable): no more than 2.06 pounds per hour and not to exceed 0.136 pounds per ton of aluminum coil coated;
 - (d) VOCs (as propane): no more than 5.29 pounds per hour and not exceed to 0.348 pounds per ton of aluminum coil coated;
 - (e) NO_X : no more than 24.46 pounds per hour; and
 - (f) CO: no more than 13.23 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.34 For Emission Point AA-070, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart TT – Standards of Performance for Metal Coil Surface Coating and 40 CFR Part 60, Subpart A – General Provisions.

(Ref.: 40 CFR 60.460; Subpart TT)

3.35 For Emission Point AA-070, the permittee shall not discharge into the atmosphere more than ten (10.0) percent of the total VOCs applied [i.e. ninety (90.0) percent emission reduction] for each calendar month while continuously using a thermal oxidizer operated the overall reduction efficiency determined in accordance with Condition 5.43(a).

(Ref.: 40 CFR 60.462(a)(3); Subpart TT)

3.36 For Emission Point AA-070, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart SSSS –NESHAP for Metal Coil Surface Coating and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 2 of Subpart SSSS).

For the purpose of this permit, the application of incidental markings (including letters, numbers, or symbols) that are added to bare metal coils and used for product identification or for product inventory control do not apply to Subpart SSSS. However, the application of letters, numbers, or symbols to a coated metal coil is considered part of the coil coating process and subject to Subpart SSSS.

(Ref.: 40 CFR 63.5090(a) and (e), 63.5140(c), and Table 2; Subpart SSSS)

- 3.37 For Emission Point AA-070, the permittee shall at all times comply with one of the following emission standards:
 - (a) Limit the emission of organic hazardous air pollutants (HAPs) to no more than two
 (2) percent of the total organic HAPs applied for each month [i.e. a ninety-eight (98) percent reduction] within a rolling 12-month period; or
 - (b) Limit the emission of organic HAPs to no more than 0.046 kilograms per liter of solids applied based on a rolling 12-month period; or
 - (c) <u>If the permittee utilizes a thermal oxidizer to control the emission of organic HAPs</u>: Operate the thermal oxidizer such that the organic HAP outlet concentration is no more than twenty (20) parts per million by volume on a dry basis <u>and</u> the capture efficiency of the corresponding emission capture system(s) is 100 percent.

(Ref.: 40 CFR 63.5120(a); Subpart SSSS)

3.38 For Emission Point AA-070, the permittee shall comply at all times comply with the following operating limits after establishing in accordance with the applicable testing:

- (a) <u>For a thermal oxidizer</u>: Maintain the average combustion temperature in any 3-hour period at or above the combustion temperature limit established in accordance with Condition 5.47(b)(2); and
- (b) <u>For an emissions capture system</u>: Maintain the operating parameter value (or range of values) determined by Condition 5.47(c)(1)(i) that represent the conditions indicative of proper operation and maintenance of the capture system.

(Ref.: 40 CFR 63.5121(a) and Table 1; Subpart SSSS)

- 3.39 For Emission Point AA-071, the permittee shall comply with the following emission limits (based on a 3-hour average):
 - (a) NO_X: no more than 11.2 pounds per MMscf of natural gas combusted; and
 - (b) CO: no more than 38.0 pounds per MMscf of natural gas combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.40 For Emission Point AA-071, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

(Ref.: 40 CFR 60.40c(a); Subpart Dc)

- 3.41 For Emission Points AA-072 through AA-075, the permittee shall utilize a mist eliminator and a maximum drift percentage of 0.0005% to comply with the following emission limits:
 - (a) PM (filterable): no more than 0.13 pounds per million gallons (MMgal) of circulating water;
 - (b) PM_{10} (filterable and condensable): no more than 0.009 pounds per MMgal of circulating water; and
 - (c) $PM_{2.5}$ (filterable and condensable): no more than 1.28×10^{-4} pounds per MMgal of circulating water.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k) – PSD Air Quality Limits)

3.42 For Emission Points AA-076 through AA-079, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 60, Subpart A – General Provisions (as required by Table 8 of Subpart IIII).

(Ref.: 40 CFR 60.4200(a)(2); Subpart IIII)

3.43 For Emission Points AA-076 through AA-079, the permittee shall only combust diesel fuel within each engine that meet the following requirements (on a per-gallon basis):

- (a) A maximum sulfur content of fifteen (15) parts per million (ppm); and
- (b) A minimum cetane index of forty (40) or a maximum aromatic content of thirty-five (35) volume percent.

(Ref.: 40 CFR 60.4207(b); Subpart IIII)

- 3.44 For Emission Points AA-076 through AA-079, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If an engine is not operated in accordance with paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under the applicable regulation and shall meet all requirements for a corresponding non-emergency engine.
 - (a) There is no time limit on the use of an engine in emergency situations.
 - (b) The permittee may operate an engine 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 accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
 - (c) The permittee may operate an engine for up to 50 hours per calendar year in nonemergency 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. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1) – (3); Subpart IIII)

- 3.45 For Emission Points AA-076, AA-077, and AA-078, the permittee shall comply with the following emission standards:
 - (a) Nitrogen Oxides and Non-Methane Hydrocarbons (NO_X + NMHC): 6.4 grams per kilowatt-hour;
 - (b) CO: 3.5 grams per kilowatt-hour; and
 - (c) PM: 0.20 grams per kilowatt-hour.

The permittee shall operate and maintain each engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII) (Ref.: Table 2 in Appendix I; Part 1039)

- 3.46 For Emission Points AA-076, AA-077, and AA-078, the permittee shall not discharge into the atmosphere smoke that exceeds the following opacity standards:
 - (a) Twenty (20) percent during acceleration mode;
 - (b) Fifteen (15) percent during lugging mode; and
 - (c) Fifty (50) percent during the peaks in either the acceleration or lugging modes.

The permittee shall operate and maintain each engine in such a manner to achieve the referenced opacity standards over the entire life of the engine.

(Ref.: 40 CFR 60.4202(a)(2) and 60.4205(b); Subpart IIII) (Ref.: 40 CFR 1039.105; Subpart B)

- 3.47 For Emission Point AA-079, the permittee shall comply with the following emission standards:
 - (a) $NO_X + NMHC$: 4.0 grams per kilowatt-hour;
 - (b) CO: 3.5 grams per kilowatt-hour; and
 - (c) PM: 0.20 grams per kilowatt-hour.

The permittee shall operate and maintain the engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4205(c), 60.4206, and Table 4; Subpart IIII)

3.48 For Emission Point AA-079, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart ZZZZ –NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 63, Subpart A – General Provisions (as required by Table 8 of Subpart ZZZZ).

For the purpose of this permit, stationary RICE is classified as "new" if construction or reconstruction commenced on / after June 12, 2006. For new RICE, the permittee shall comply with the applicable requirements in Subpart ZZZZ by complying with 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Combustion Engines. No further requirements apply under Subpart ZZZZ.

Emission Points AA-075, AA-076, and AA-077 are not subject to the provisions specified in Subpart ZZZZ, but the permittee shall comply with the initial notification requirement specified in 40 CFR 63.6590(b)(1) – Subpart ZZZZ.

(Ref.: 40 CFR 63.6585(a), (b), 63.6590(b)(1)(i), and (c)(7); Subpart ZZZZ)

SECTION 4. WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Work Practice
AA-000	40 CFR 63.1506(a)(5); Subpart RRR 40 CFR 63.7500(a)(3); Subpart DDDDD 40 CFR 63.5140(b); Subpart SSSS	4.1	PM HCl HF D/F Opacity CO Organic HAPs	General Duty Clause (As Applicable)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Standard)	4.2	PM ₁₀ / PM _{2.5} (filterable + condensable) NO _X CO	Good Combustion, Operational, and Maintenance Practices (As Applicable)
AA-001 through AA-003 AA-007 through AA-019 through AA-019 through AA-021	40 CFR 63.1506(b); Subpart RRR	4.3	PM (D/F) HCl Opacity	Post and Maintain Adequate Labeling
AA-002 AA-003 AA-008 AA-009 AA-014 AA-015 AA-020 AA-021	40 CFR 63.1506(m)(5); Subpart RRR	4.4	HCl	Maintain the Total Reactive Chlorine Flux Injection Rate
AA-004 AA-010 AA-016 AA-022	40 CFR 63.1506(k), (m)(1) – (4), and (p); Subpart RRR	4.5	PM (D/F) HCl Opacity	Operational Requirements (As Applicable)
AA-044 through AA-053 AA-071	40 CFR 63.7515(d), 63.7540(a)(10), (12), (13), and Table 3 (Item 1); Subpart DDDDD	4.6	CO Oxygen	Conduct a Routine Performance Tune- Up

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Work Practice
AA-044 through AA-053 AA-071	40 CFR 63.7540(a)(12); Subpart DDDDD	4.7	Minimum Oxygen Concentration	Set the Level on the Oxygen Trim System
AA-072 through AA-075	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) (PSD BACT Standard)	4.8	PM (filterable) PM ₁₀ / PM _{2.5} (filterable + condensable)	Operate and Maintain Minimum Drift
AA-076 through AA-079	40 CFR 60.4211(a); Subpart IIII	4.9	NMHC + NO _X CO PM	Perform Best Management Practices

4.1 For Emission Point AA-000 (Facility-Wide), as applicable, the permittee shall at all times operate and maintain each applicable unit (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions.

The permittee shall determine and implement safety and good air pollution control practices based on the information available to the MDEQ, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and the inspection of the applicable unit.

(Ref.: 40 CFR 63.1506(a)(5); Subpart RRR and 40 CFR 63.7500(a)(3); Subpart DDDDD) (Ref.: 40 CFR 63.5140(b); Subpart SSSS)

4.2 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall operate and maintain each natural gas-fired process unit in accordance with the "good combustion, operational, and maintenance practices" recommended by the manufacturer(s) in order to comply with the corresponding NO_x and/or CO emission limits in specified in Section 3 of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Standard)

- 4.3 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall post and maintain an easily visible label on each "group 1 furnace" (i.e. the melting furnace and holding furnace) and in-line degasser that identifies the following information:
 - (a) The type of unit (e.g. "group 1 furnace", "in-line fluxer", etc.);
 - (b) The applicable emission limits and corresponding means of compliance;
 - (c) The applicable operational standard(s) and control method(s) (i.e. a work practice or control device) that shall include (but is not limited to) the following information:

- (1) The type of charge to be used for a furnace (e.g. clean scrap only, all scrap, etc.);
- (2) The flux materials and addition practices; and
- (3) The applicable operating parameter ranges and requirements as incorporated in the Operation, Maintenance, and Monitoring (OM&M) Plan required by Condition 5.4.

(Ref.: 40 CFR 63.1506(b); Subpart RRR)

4.4 For Emission Points AA-002, AA-003, AA-008, AA-009, AA-014, AA-015, AA-020, and AA-021, the permittee shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established in accordance with Condition 5.14 (40 CFR 63.1512(o); Subpart RRR).

(Ref.: 40 CFR 63.1506(m)(5); Subpart RRR)

- 4.5 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall comply with the following operational requirements (as applicable):
 - (a) *If the Filter House uses a bag leak detection system*:
 - (1) The permittee shall both initiate corrective action within one (1) hour of an alarm and complete the corrective action in accordance with the OM&M Plan required by Condition 5.4.
 - (2) The permittee shall operate the baghouse in such a manner that the bag leak detection system alarm does not sound more than five (5) percent of the operating time during a 6-month block reporting period.

In calculating this operating time fraction, the permittee does not have to count an alarm time if the corresponding inspection of the baghouse demonstrates that no corrective action is required. However, if corrective action is required, each alarm shall be counted as a minimum of one (1) hour.

If the permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action.

- (b) <u>If the Filter House uses a continuous opacity monitoring system (COMS)</u>: The permittee shall both initiate corrective action within one (1) hour of any 6-minute average reading of at least five (5) percent and complete the corrective action in accordance with the OM&M Plan required by Condition 5.4.
- (c) The permittee shall maintain the 3-hour block average inlet temperature to each baghouse at or below the average temperature established in accordance with Condition 5.18(a) plus 25°F.

- (d) For the continuous lime injection system, the permittee shall both maintain freeflowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at or above the level established in accordance with Condition 5.18(b).
- (e) <u>For any corrective action</u>: A corrective action must restore operation of the unit(s) [including the control device] to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

Corrective actions taken must include follow-up actions necessary to return the process unit(s) or control device parameter level(s) to the value or range of values established during the most recently completed performance test and steps to prevent the likely recurrence of the cause of a deviation.

(Ref.: 40 CFR 63.1506(k), (m)(1) – (4), and (p); Subpart RRR)

- 4.6 For Emission Points AA-044 through AA-053 and AA-071, the permittee shall conduct a performance tune-up on each boiler and metal process furnace in accordance with the following requirements:
 - (a) The permittee shall conduct the initial tune-up no later than five (5) years after the respective initial start-up of a unit. Thereafter, the permittee shall conduct a tune-up on each unit in accordance with the following specified frequency (as applicable):
 - (1) <u>If a unit has a continuous oxygen trim system</u>: once every five (5) years and no later than sixty-one (61) months after the previously completed tune-up; or
 - (2) <u>If a unit does not have a continuous oxygen trim system</u>: biennially and no later than twenty-five (25) months after the previously completed tune-up.

If a unit is not operating on the required date for a tune-up, the permittee shall conduct the tune-up within thirty (30) calendar days of start-up.

- (b) The permittee shall conduct each tune-up in accordance with the following requirements:
 - (1) As applicable, inspect the burner and clean / replace any components of the burner as necessary. The inspection may be performed at any time prior to the tune-up or delayed until the next scheduled furnace shutdown.
 - (2) As applicable, inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications (if available).
 - (3) As applicable, inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled furnace shutdown.

- (4) Optimize total emission of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications (if available) and with any nitrogen oxide (NO_X) requirement to which the boiler or metal process furnace is subject.
- (5) Measure the concentrations in the effluent stream of CO in parts per million by volume and oxygen (O₂) in volume percent before and after the adjustments are made. The measurements may be either on a wet or dry basis as long as the basis remains the same before and after the adjustments are made. The measurements may be taken using a portable CO analyzer.
- (6) The permittee shall maintain on-site the following information collected during a tune-up:
 - (i) The concentration of CO in the effluent stream in parts per million and the oxygen concentration in volume percent measured at high fire or the typical operating load before and after the tune-up of the furnace;
 - (ii) A description of any corrective action taken as a part of the tune-up of the boiler or metal process furnace; and
 - (iii) The type and amount of fuel used over the last twelve (12) months prior to tune-up of the boiler or metal process furnace <u>but</u> only if the unit was physically and legally capable of using more than one type of fuel during that period.

(Ref.: 40 CFR 63.7515(d), 63.7540(a)(10), (12), (13), and Table 3 (Item 1); Subpart DDDDD)

4.7 For Emission Points AA-044 through AA-053 and AA-071, the permittee shall set the oxygen level concentration on the oxygen trim system no lower than the concentration measured during the most recent tune-up.

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

4.8 For Emission Points AA-072 through AA-075, the permittee shall operate and maintain the mist eliminator(s) (with a maximum drift percentage of 0.0005%) within each cooling tower in accordance with manufacturer's specifications and recommendations to comply with the PM (filterable), PM₁₀ (filterable and condensable), and PM_{2.5} (filterable and condensable) emission limits specified in Condition 3.41.

Additionally, the permittee shall maintain documentation that details the manufacturer's specifications and recommendations for each cooling tower.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) – PSD BACT Standard)

4.9 For Emission Points AA-076 through AA-079, the permittee shall adhere to the following work practices:

- (a) Operate and maintain each engine and control device (if any) according to the manufacturer's emission-related written instructions;
- (b) Change only those emission-related settings that are permitted by the manufacturer; and
- (c) Meet the requirements of 40 CFR Part 1068 (as applicable).

(Ref.: 40 CFR 60.4211(a); Subpart IIII)

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain Records For a Minimum of Five (5) Years
		5.2	PM (filterable) PM ₁₀ / PM _{2.5}	
			(filterable + condensable)	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).		NO _X	General Performance Test Requirements
AA-000			CO VOCs (as propane)	
			HF	
			H_2SO_4	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.3	PM (filterable)	Develop, Implement, and Maintain a Written GCOMP Plan
			PM ₁₀ / PM _{2.5} (filterable + condensable)	
			NO _X	
			СО	
AA-001 through AA-004	40 CFR 63.1510(b) and 631510(s)(1) – (2); Subpart RRR	5.4	PM (D/F) HCl Opacity	Prepare, Implement, and Maintain a Written OM&M Plan
AA-007 through AA-010	40 CFR 63.1517(b)(1)(i) – (ii), (3), (4)(i) – (ii), (5) – (7), (11), (13) – (18), and (20); Subpart RRR	5.5		Recordkeeping Requirements
AA-013 through AA-016	40 CFR 63.1510(c); Subpart RRR	5.6		Inspect Labeling Monthly
AA-019 through AA-022	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.6		

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
	40 CFR 63.1506(c) and 63.1510(d)(1); Subpart RRR	5.7	PM (D/F) HCl Opacity	Install, Operate, and Maintain an Emissions Capture / Collection System
AA-001 through AA-003	40 CFR 63.1510(d)(2); Subpart RRR	5.8		Perform an Inspection on Each Emissions Capture / Collection System Once Every Calendar Year
AA-007 through AA-009	40 CFR 63.1506(d); Subpart RRR	5.9		Install, Operate, and Maintain a Weight Measurement Device
AA-013 through AA-015	40 CFR 63.1510(e); Subpart RRR	5.10	Material Throughput	Measure the Total Weight of the Feed / Charge or Aluminum Production (Each Unit)
AA-019 through AA-021	40 CFR 63.1510(t) and 63.1513(f); Subpart RRR	5.11	PM D/F HCl	Calculate Emissions Daily (Based on 3-Day, 24-Hour Rolling Average)
AA-021	40 CFR 63.1514; Subpart RRR	5.12		Monitoring / Recordkeeping Requirements for Change in Furnace Operations (As Applicable)
AA-002 AA-003 AA-008 AA-009	40 CFR 63.1510(j)(1) and (5); Subpart RRR	5.13	Total Reactive Chlorine Flux Injection Rate	Install, Calibrate, Maintain, and Operate an Injection System
AA-014 AA-015 AA-020 AA-021	40 CFR 63.1512(0); Subpart RRR	5.14		Establish an Operating Limit
	40 CFR 63.1510(f)(1) – (2), (h), and (i); Subpart RRR	5.15	PM (D/F) HCl Opacity	Install, Maintain, and Operate Each Filter House
	40 CFR 63.1511(a); Subpart RRR	5.16		Prepare a Site-Specific Test Plan for Approval
AA-004 AA-010 AA-016 AA-022	40 CFR 63.1511(b), (e), (h), (k), and 63.1513(d) – (f); Subpart RRR 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.17		Conduct Routine Performance Testing
	40 CFR 63.1512(n) and (p); Subpart RRR	5.18	Inlet Gas Temperature Lime Injection Rate	Establish an Operating Limit
AA-004 AA-010 AA-016 AA-022	40 CFR 63.1512(l); Subpart RRR	5.19	Opacity	Compliance Demonstration Requirements for COMS (As Applicable)

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-004 AA-010 AA-016 AA-022	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.20	PM ₁₀ / PM _{2.5} (filterable) Condensable PM VOCs CO NO _X	Conduct Routine Performance Testing
AA-027 AA-029 AA-035 AA-038 AA-041 AA-042 AA-043	AA-029 AA-035 AA-038 AA-041 AA-042 AA-043 AA-054 AA-054 AA-057 AA-060 AA-062 AA-063 AA-066	5.21	Differential Pressure	Install, Calibrate, Operate, and Maintain an Applicable CMS for Each Baghouse and Scrubber Perform a Routine Inspection on Each Baghouse, Wet Scrubber, and Mist Eliminator
AA-054 AA-056 AA-057 AA-060 AA-062 AA-063 AA-066 AA-068		5.22	Scrubbing Liquid Flow Rate Exhaust Gas Flow Rate	Establish an Operating Limit (or Operating Limit Range) for Each Baghouse, Scrubber, and Mist Eliminator
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.23	PM / PM ₁₀ / PM _{2.5} (filterable only)	Conduct Routine Performance Testing
AA-027 AA-029		5.24	Differential Pressure Drop	Monitor the Differential Pressure Drop Across Each Baghouse Daily Maintain Documentation on Any Corrective Actions Taken
AA-030 through AA-034	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.25	Natural Gas Consumption	Monitor Total Usage (Monthly and Rolling 12-Month Total)
AA-035 AA-038 AA-041 AA-042 AA-043	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.26	Capture Efficiency	Develop, Maintain, and Implement an ECCS Monitoring Plan
AA-035 AA-038 AA-054 AA-060	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.27	Differential Pressure Drop	Continuously Monitor the Differential Pressure Drop (3-Hour Block Average) Maintain Documentation on Any Corrective Actions Taken
AA-035 AA-038	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.28	Aluminum Throughput	Monitor the Quantity Processed Within Each Mill (Monthly and Rolling 12-Month Total)

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-035 AA-038	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.29	PM / PM ₁₀ / PM _{2.5} (filterable) Condensable PM VOCs	Conduct Routine Performance Testing
AA-041 AA-042 AA-043 AA-056 AA-057 AA-062 AA-063 AA-066 AA-068	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.30	Scrubbing Liquid Flow Rate	Continuously Monitor the Flow Rate for Each Scrubber (3-Hour Block Average) Maintain Documentation on Any Corrective Actions Taken
AA-041 AA-042 AA-043	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.31	PM / PM ₁₀ / PM _{2.5} (filterable) Condensable PM VOCs	Conduct Routine Performance Testing
AA-044 through AA-053 AA-071	40 CFR 63.7555(a)(1); Subpart DDDDD	5.32	HAPs	Recordkeeping Requirements
AA-044 through AA-053	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.33	Natural Gas Consumption	Monitor Total Usage (Monthly and Rolling 12-Month Total)
AA-054 AA-060	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.34	Aluminum Strip Throughput	Monitor the Combined Area of Aluminum Strip Processed (Monthly and Rolling 12- Month Total)
AA-054 AA-060 AA-066	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.35	PM / PM ₁₀ / PM _{2.5} (filterable) Condensable PM VOCs	Conduct Routine Performance Testing
AA-055 AA-061	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.36	Natural Gas Consumption	Monitor Total Usage (Monthly and Rolling 12-Month Total)
AA-056 AA-057 AA-063 AA-068	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.37	PM / PM ₁₀ / PM _{2.5} (filterable) Condensable PM VOCs HF H ₂ SO ₄	Conduct Routine Performance Testing

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-058 AA-064	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.38	Natural Gas Consumption	Monitor Total Usage (Monthly and Rolling 12-Month Total)
AA-066 AA-068	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.39	Aluminum Strip Throughput	Monitor the Combined Area of Aluminum Strip Processed (Monthly and Rolling 12- Month Total)
AA-067	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.40	VOCs	Recordkeeping Requirements for Lubricants Calculate Emissions (Monthly and Rolling 12-Month Total)
	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.41	Aluminum Coil Throughput	Monitor the Total Quantity of Aluminum Coil Coated (Monthly and Rolling 12-Month Total)
	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.42	PM / PM ₁₀ / PM _{2.5} (filterable only) VOCs NO _X CO	Conduct Routine Performance Testing
	40 CFR 60.463(c)(2); Subpart TT	5.43	VOCs	Continuous Compliance Requirements
	40 CFR 60.463(c)(1) and 60.464(a); Subpart TT	5.44		Calculate the Average VOC Content of Coating Applied Monthly (As Applicable) Recordkeeping Requirements for Coatings
AA-070	40 CFR 60.464(c); Subpart TT 40 CFR 63.5150(a)(3)(i), (ii), and 63.5150(b); Subpart SSSS	5.45	Combustion Temperature	Install, Calibrate, Maintain, and Operate Temperature Monitoring Equipment Record All 3-Hour Periods in Which the Average Temperature is 50°F Below the Operating Limit
	40 CFR 60.465(e); Subpart TT	5.46	VOCs Combustion Temperature	Recordkeeping Requirements
	40 CFR 63.5150(a)(4) and 63.5160(b) – (e); Subpart SSSS 11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.47	Organic HAPs Capture Efficiency Destruction Efficiency VOCs	Monitoring and Performance Testing Requirements
	40 CFR 63.5170(c) and (d); Subpart SSSS	5.48	Organic HAPs	Continuous Compliance Demonstration Options (As Applicable)

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
	40 CFR 63.5190(a)(1) – (3) and (5); Subpart SSSS	5.49	Organic HAPs	Recordkeeping Requirements
AA-070	40 CFR 63.5190(c); Subpart SSSS	5.50		CEDRI Recordkeeping Requirements
AA-071	40 CFR 60.48c(g)(2); Subpart Dc	5.51	Natural Gas Usage	Monitor the Amount of Natural Gas Combusted Monthly
AA-072 through AA-075	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.52	Total Dissolved Solids (TDS)	Monitor the TDS Content in the Recirculating Water for Each Cooling Tower Quarterly
	40 CFR 60.4214(b); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.53	Emergency Engine Status	Monitor the Hours of Operation Monthly (Emergency and Non-Emergency Service)
AA-076 through AA-079	40 CFR 60.4114(a)(2); Subpart IIII	5.54	NMHC + NO _X CO PM	Recordkeeping Requirements
	40 CFR 60.4211(g)(2) and (3); Subpart IIII	5.55		Compliance Demonstration Requirements (As Applicable)

5.1 For Emission Point AA-000 (Facility-Wide), the permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes (but is not limited to) all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the MDEQ as required by Applicable Rules and Regulations or this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

- 5.2 For Emission Point AA-000 (Facility-Wide applicable units only), unless otherwise specified herein, the permittee shall conduct any performance test required by Section 5 of this permit in accordance with the following requirements:
 - (a) The permittee shall conduct a performance test in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event.
 - (b) The permittee shall conduct a minimum of three (3) separate test runs at a duration of least one (1) hour for a performance test.

(c) As applicable, the permittee shall conduct a performance stack test at representative operating conditions. For the purpose of this permit, "*representative operating conditions*" is defined as the operation of a process unit (or group of process units) at a material process or production rate that will be typical in the future thereafter the performance test.

Operation during periods of start-up, shutdown, and/or non-operation do not constitute "*representative operating conditions*". Additionally, the permittee may not conduct performance tests during periods of malfunction. The permittee shall monitor and record applicable process data to indicate the operating conditions during a performance test, including (but not limited to) to the following information:

- (1) The applicable material processing / production throughput on an hourly basis; and
- (2) The applicable parametric operating data from any air pollution control device (or any device that directly minimizes the emission of a pollutant) associated with a process unit (or group of units) on a continuous basis [i.e. once every fifteen (15) minutes].
- (d) As applicable, the permittee shall conduct a performance stack test at representative load conditions. For the purpose of this permit, "*representative load conditions*" is defined as the operation of a fuel burning process unit (or group of process units) at a heat input rate and/or fuel consumption rate that will be typical in the future thereafter the performance test.
- (e) As deemed necessary, the MDEQ may require the permittee to conduct a subsequent performance test if the heat input rate or processing / production rate for a process unit (or group of process units) increases by more than ten (10.0) percent of the average rate established during the previously completed performance test.
- (f) As applicable, the permittee shall monitor and maintain the total quantity of natural gas combusted by each applicable process unit (or group of units) during each test run of a performance test.

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

5.3 For Emission Point AA-000 (Facility-Wide), the permittee shall develop, maintain, and implement a "Good Combustion, Operational, and Maintenance Practices" (GCOMP) Plan that details the manufacturer specifications and / or recommendations applicable to each natural gas-burning process unit in accordance with Condition 4.2.

Additionally, the permittee shall maintain documentation that details the results of any inspection, evaluation, survey, or corrective / maintenance actions completed in accordance with the GCOMP Plan. As deemed necessary, the permittee shall revise the GCOMP Plan to address any changes and/or to incorporate additional best good practices.

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

- 5.4 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall prepare, implement, and maintain a written Operation, Maintenance, and Monitoring (OM&M) Plan that details the following information:
 - (a) The process and control device parameters to be monitored for demonstrating compliance as well as the established operating value(s) or range(s) (as applicable) for each process and control device;
 - (b) A monitoring schedule for each applicable unit;
 - (c) The procedures for the proper operation and maintenance of each process unit and control device;
 - (d) The procedures for the proper operation and maintenance of each monitoring device or system used to determine compliance with emission limits specified in Condition 3.6 [or Condition 3.7(a) (c) or Condition 3.8(a) (b) (as applicable)]. The procedures shall also include the following information:
 - (1) The calibration and certification of accuracy of each monitoring device / system conducted at least once every six (6) months and in accordance with the manufacturer's instructions; and
 - (2) The procedures for the quality control and quality assurance of a continuous emission monitoring system or continuous opacity monitoring system (as required by the 40 CFR Part 63, Subpart A).
 - (e) The procedures for the monitoring process and control device parameters [including lime injection rates, procedures for the annual inspection of afterburners and (if applicable) the procedure to be used for determining the charge / feed (or throughput) weight if a measurement device is not used];
 - (f) The corrective actions to be taken when either the process / operating parameters or control device parameters deviate from the value(s) or range(s) specified in paragraph (a) of this condition. The permittee shall also outline the following information:
 - (1) The procedures for determining and recording both the cause of any deviation (or excursion) and the time in which a deviation (or excursion) begins and ends; and
 - (2) The procedures for recording the corrective action taken, the time the corrective action was initiated, and the date / time that the corrective action was completed.
 - (g) A maintenance schedule for each process unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance;

- (h) Documentation on the work practice and pollution prevention measures used to achieve compliance with the emission limits specified in Condition 3.6 [or Condition 3.7(a) (c) or Condition 3.8(a) (b) (as applicable)]; and
- (i) The procedures to be followed when changing furnace classifications under the specifications outlined in 40 CFR 63.1514; Subpart RRR.
- (j) For each secondary aluminum processing unit, the plan shall include the following information:
 - (1) The identification of each process unit within the secondary aluminum processing unit;
 - (2) The specific control technology or pollution prevention measure to be used for each process unit within the secondary aluminum processing unit as well as the date of its installation or application;
 - (3) The emission limit calculated for each secondary aluminum processing unit and the performance test results with supporting calculations that demonstrate initial compliance with each applicable emission limit;
 - (4) The information and data that demonstrates compliance for each process unit with all applicable design, equipment, work practice, or operational standards promulgated by Subpart RRR; and
 - (5) The monitoring requirements applicable to each process unit within a secondary aluminum process unit and the monitoring procedures for the daily calculation of the 3-day, 24-hour rolling average in accordance with Condition 5.11.
 - (6) The compliance-related procedures <u>may not</u> contain any of the following provisions:
 - (i) Any averaging among emissions of differing pollutants;
 - (ii) The inclusion of any process unit(s) other than the units found within the secondary aluminum processing unit;
 - (iii) The inclusion of any process unit while it is shutdown; or
 - (iv) The inclusion of any periods of start-up or shutdown in the emission calculations.

If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan that incorporates them. Additionally, if the MDEQ determines at any time after receipt of the OM&M Plan that any revisions to the plan are necessary to satisfy applicable requirements, the owner or operator must promptly make all necessary revisions and resubmit the revised plan.

(Ref.: 40 CFR 63.1510(b) and (s)(1) – (2); Subpart RRR)

- 5.5 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall maintain documentation that details the following information (as applicable):
 - (a) Records on the feed / charge (or throughput) weights for each operating cycle or the time period used in the most recent performance test required by Condition 5.17;
 - (b) *If a bag leak detection system is used in a Filter House*:
 - (1) The number of total operating hours during each 6-month reporting period;
 - (2) The date / time of each alarm,
 - (3) The date / time that the corrective action(s) was initiated and completed; and
 - (4) A brief description of the cause of the alarm and the corrective action(s) taken.
 - (c) *If a COMS is used in a Filter House*:
 - (1) Records on opacity measurement data [including the records in which the average opacity of any 6-minute period exceeds five (5) percent];
 - (2) If the average opacity of any 6-minute period exceeds 5%:
 - (i) A brief explanation on the cause of the emissions,
 - (ii) The date / time that the emissions occurred,
 - (iii) The date / time in which the corrective action(s) was initiated and completed; and
 - (iv) The corrective action(s) taken.
 - (d) *For each Filter House*:
 - (1) Records on each 15-minute block average inlet temperature to a Filter House [including any period when the 3-hour block average temperature exceeds the operating limit required by Condition 4.5(c) as well as a brief explanation on the cause of the excursion and the corrective action(s) taken];
 - (2) Records on each inspection conducted at least once every 8-hour period that verifies lime is present in the feeder hopper / silo and flowing [including any inspection where blockage is found as well as a brief explanation on the cause of the blockage and the corrective action(s) taken]; and

- (3) If an inspection conducted at least once every 8-hour period discovers a <u>blockage</u>: records on each inspection conducted at least once every 4-hour period for the subsequent three (3) days.
- (4) If a flow monitor, a pressure drop sensor, or a load cell is used to verify that lime is present in the hopper / silo and flowing: records on all monitor or sensor output [including any event where blockage was found as well as a brief explanation on the cause of the blockage and the corrective action(s) taken];
- (5) <u>If lime feeder setting is monitored</u>: records on each daily and monthly inspection of feeder setting [including records on any deviation of the feeder setting from the setting used in the performance test required by Condition 5._ as well as a brief explanation on the cause of the deviation and the corrective action(s) taken]; and
- (6) If a lime feeder has been repaired or replaced, the permittee shall document this action along with the records on the new feeder calibration and the feed mechanism set points necessary to maintain the operating limit specified in Condition 5.18(b).
- (e) *For each holding furnace or in-line degasser*:
 - (1) Records on each 15-minute block average weight of reactive flux injection (gaseous or liquid);
 - (2) The total reactive flux injection rate and the corresponding calculations required by Condition 5.14;
 - (3) Records on the identity, composition, and weight of each gaseous, liquid or solid reactive flux added; and
 - (4) Records on any period in which the injection rate exceeds the operating limit specified Condition 4.4 and the corrective action(s) taken.
- (f) <u>For each continuous monitoring system (CMS)</u>: records required by 40 CFR 63.10(c), Subpart A;
- (g) For each in-line degasser that the permittee has certified no reactive flux was used: the permittee shall maintain one of the following forms of documentation:
 - (1) The operating logs that establish that no source of reactive flux was present at the in-line degasser;
 - (2) The labels required by Condition 4.3 establish that no reactive flux may be used at the in-line degasser; or
 - (3) The operating logs that document each flux gas, agent, or material used during each operating cycle.

- (h) Records on each monthly inspection that evaluates the proper labeling of each applicable process unit;
- Records on each annual inspection of an emissions capture / collection system or closed vent system <u>unless</u> the permittee opts to use an alternative to the annual flow rate measurement.

If an alternative is used, the permittee shall maintain information on one of the following items:

- (1) Records on the differential pressure; fan RPM or fan motor amperage; or static pressure measurements; or
- (2) Records on the duct centerline velocity using a hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring, or an orifice plate equipped with an associated thermocouple (as appropriate)
- (j) Records on any approved alternative monitoring procedure or test procedure;
- (k) A current copy of the OM&M Plan required by Condition 5.4 (including any revisions and records that indicate conformance with specific items in the plan as applicable);
- (l) <u>For each secondary aluminum processing unit</u>: records on the total charge weight (or the total aluminum produced) for each 24-hour period as well as the associated calculations for the 3-day, 24-hour rolling average emissions;
- (m) If the permittee fails to comply with an applicable standard, the permittee shall maintain the following information:
 - (1) Records that detail the emission unit ID, the monitor ID, the pollutant or parameter monitored, the beginning date / time of the event, the end date / time of the event, the cause of the deviation or exceedance, and corrective action(s) taken; and
 - (2) Records on the actions taken during periods of malfunction to minimize emissions in accordance with Condition 4.1 [including corrective actions to restore malfunctioning process units and air pollution control / monitoring equipment to its normal or usual manner of operation].
- (n) If the permittee opts to change operating mode of "*group 1 furnace*", the permittee shall maintain the following information:
 - (1) The date and time of each change in furnace operating mode; and
 - (2) The nature of the change in operating mode (e.g. from "group 1 controlled furnace processing other than clean charge" to "group 2 furnace").

(Ref.: 40 CFR 63.1517(b)(1)(i) – (ii), (3), (4)(i) – (ii), (5) – (7), (11), (13) – (18), and (20); Subpart RRR)

5.6 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall inspect the labeling required by Condition 4.3 at least once per calendar month to confirm that the posted labels are intact and legible.

Additionally, the permittee shall maintain documentation that details the date / time of each inspection, the results of each inspection, and any corrective actions taken based on the results of inspection.

(Ref.: 40 CFR 63.1510(c); Subpart RRR and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 5.7 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall install, operate, and maintain an emissions capture / collection system for each unit in accordance with the following requirements:
 - (a) The permittee shall design and install the emissions capture / collection system to meet the engineering standards the minimum exhaust rates or facial inlet velocities as contained in the American Conference of Governmental Industrial Hygienists (ACGIH) guidelines.
 - (b) The permittee shall vent captured emissions through a closed system with the exception being that dilution air may be added to an emission stream for the purpose of controlling the temperature at the inlet of the baghouse.
 - (c) The permittee shall operate each emissions capture / collection system in accordance with the procedures and requirements outlined in the OM&M Plan required by Condition 5.4.

(Ref.: 40 CFR 63.1506(c) and 63.1510(d)(1); Subpart RRR)

5.8 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall perform and record an inspection of each emissions capture / collection system and closed vent system at least once every calendar year to ensure a system is operating in accordance with the operating requirements specified in Condition 5.7.

The permittee shall conduct each inspection in accordance with the following requirements:

(a) The permittee shall include a volumetric flow rate measurement taken at a location in the ductwork downstream of the hood that is representative of the actual volumetric flow rate without interference (due to leaks, ambient air added for cooling purposes, or a duct from another hood). (b) The volumetric flow rate measurement shall be performed in accordance with 40 CFR 63.1510(d)(2)(i), (ii), or (iii), Subpart RRR (as applicable).

However, as an alternative to the flow rate measurement, the permittee may satisfy the requirements of this inspection <u>and</u> the corresponding operating requirements by including a permanent total enclosure verification that is conducted in accordance with 40 CFR 63.1510(d)(2)(i) or (iv), Subpart RRR (as applicable).

For any inspection that fails to successfully demonstrate compliance with the specified operating requirements, the permittee shall perform the following actions:

- (c) Initiate and record repairs and/or adjustments to the system operating conditions; and
- (d) Perform and record a follow-up inspection within forty-five (45) days of the initial inspection to demonstrate compliance with the specified operating requirements.

(Ref.: 40 CFR 63.1510(d)(2); Subpart RRR)

- 5.9 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall install, operate, and maintain a weight measurement device for each unit in accordance with the following requirements:
 - (a) The permittee shall operate each weight measurement system (or weight determination procedure) in accordance with the OM&M Plan required by Condition 5.4.
 - (b) The permittee shall measure and record the weight of feed / charge (or throughput) for each operating cycle or the time period used in the most recent performance test required by Condition 5.17.
 - (c) As an alternative to paragraph (b) of the condition, the permittee may measure and record the aluminum production weight rather than the feed / charge weight contingent upon meeting the following stipulations:
 - (1) The aluminum production weight rather than feed / charge weight is measured and recorded for all units within a secondary aluminum production process; and
 - (2) All calculations to demonstrate compliance with an applicable emission limit are based on aluminum production weight rather than the feed / charge weight.

(Ref.: 40 CFR 63.1506(d); Subpart RRR)

5.10 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall measure and record the total weight of either the feed / charge to a process unit or the aluminum production from a process unit over the same operating cycle or the time period used in the most recent performance test required by Condition 5.17.

For the purpose of this condition, the feed / charge or aluminum production within a secondary aluminum production process shall be measured and recorded on a unit-by-unit basis.

As an alternative to a weight measurement device specified by Condition 5.9, the permittee may use a procedure deemed acceptable by the MDEQ to determine the total weight of feed / charge or aluminum production for a process unit.

The permittee shall adhere to the following requirements for any weight measurement device or procedure:

- (a) The accuracy of the device or procedure must be ± 1 percent of the weight being measured. The permittee may apply to the MDEQ for approval to use a device alternative accuracy if the specified accuracy cannot be achieved as a result equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the process unit will meet the applicable emission limit.
- (b) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer. However, if the manufacturer does not specify a calibration schedule, the permittee shall conduct a calibration at least once every six (6) months.

(Ref.: 40 CFR 63.1510(e); Subpart RRR)

5.11 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall demonstrate continuous compliance with 3-day, 24-hour rolling average emission limits determined by Condition 3.6 by calculating and recording the emission of PM, HCl, and D/F on a daily basis in accordance with the applicable procedures specified in 40 CFR 63.1510(t); Subpart RRR.

However, the permittee shall exclude periods of start-up and shutdown from the corresponding measurements and calculations.

(Ref.: 40 CFR 63.1510(t) and 63.1513(f); Subpart RRR)

5.12 For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013 through AA-015, and AA-019 through AA-021, the permittee shall conduct the applicable performance testing, establish the applicable operating limits, and maintain the applicable documentation in accordance with 40 CFR 63.1514; Subpart RRR **if** the permittee opts to change the operating mode of a furnace or in-line degasser (e.g. from a "group 1 furnace" to a "group 2 furnace").

(Ref.: 40 CFR 63.1514; Subpart RRR)

5.13 For Emission Points AA-002, AA-003, AA-008, AA-009, AA-014, AA-015, AA-020, and AA-021, the permittee shall install, calibrate, maintain, and operate each reactive flux injection system in accordance with the following requirements:

- (a) The permittee shall install, calibrate, operate, and maintain a device that continuously measures and records the weight the reactive flux (gaseous or liquid) injected into each process unit.
- (b) The monitoring system must record the weight for each 15-minute block period during which reactive fluxing occurs and over the same operating cycle (or the time period used in the most recent performance test required by Condition 5.17.
- (c) The accuracy of the weight measurement device must be ± 1 percent of the weight for the reactive component of the flux being measured. The permittee may apply to the MDEQ for permission to use a device of alternative accuracy in the case where the reactive flux flow rate is too low as to make the use of a weight measurement device with a ± 1 percent accuracy impracticable. However, a device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the process unit will meet the applicable emission limit.
- (d) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer. However, if the manufacturer does not specify a calibration schedule, the permittee shall conduct a calibration at least once every six (6) months.

The permittee may apply to the MDEQ for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight (or quantity) of reactive flux per ton of feed / charge for each operating cycle or the time period used in the most recent performance test required by Condition 5.17. However, an alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the process unit(s) will meet the applicable emission limit(s) on a continuous basis.

(Ref.: 40 CFR 63.1510(j)(1) and (5); Subpart RRR)

- 5.14 For Emission Points AA-002, AA-003, AA-008, AA-009, AA-014, AA-015, AA-020, and AA-021, the permittee shall establish an operating value (or range of values) for the total reactive chlorine flux injection rate during each performance test required by Condition 5.17 in accordance with the following requirements:
 - (a) The permittee shall continuously measure and record the weight of reactive flux injected (gaseous or liquid) for each fifteen (15) minute period during the HCl-related performance test and D/F-related performance test;
 - (b) The permittee shall determine and record the 15-minute block average weights for each of the three (3) 1-hour runs;
 - (c) The permittee shall calculate and record the total weight of reactive flux (gaseous or liquid) injected for the three (3) test runs;
 - (d) The permittee shall record the identity, composition, and total weight of each solid reactive flux added for the three (3) test runs;

(e) The permittee shall determine and record the total reactive chlorine flux injection rate by adding the respective total measured weight of chlorine within the gaseous, liquid, and/or solid reactive flux injected in accordance with the following equation:

$$W_t = (F_1)(W_1) + (F_2)(W_2)$$

Where:

 W_t = The total chlorine usage, by weight;

- F_1 = The fraction of the gaseous or liquid flux that is chlorine;
- W_1 = The weight of the reactive flux gas or liquid injected;
- F_2 = The fraction of solid reactive flux that is chlorine; and
- W_2 = The weight of solid reactive flux used.
- (1) The permittee shall divide the weight of total chlorine used (W_t) during the three (3) test runs by the total measured weight of feed recorded for the three (3) test runs;
- (2) If a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the MDEQ.

(Ref.: 40 CFR 63.1512(o); Subpart RRR)

- 5.15 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall install, calibrate, maintain, and operate each Filter House in accordance with the following requirements (as applicable):
 - (a) *For a bag leak detection system* (as applicable):
 - (1) The permittee shall install, calibrate, maintain and continuously operate a bag leak detection system for each exhaust stack of a Filter House.
 - (2) The permittee shall install, calibrate, operate, and maintain each bag leak detection system in accordance with the manufacturer's operating instructions;
 - (3) A bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of at least 0.0044 grains per acf.
 - (4) The bag leak detection system sensor must provide the output of relative or absolute PM loadings.
 - (5) The bag leak detection system must be equipped with a device that continuously records the output signal from the sensor specified in paragraph (a)(4) of this condition.

- (6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. Additionally, the alarm shall be located where it is easily heard by plant operating personnel.
- (7) For a positive pressure baghouse, the bag leak detection system must be installed within each baghouse compartment or cell.

For a negative pressure or induced-air baghouse, the bag leak detector must be installed downstream of the baghouse.

- (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (9) The baseline output must be established by adjusting the range and the averaging period of the device as well as establishing the alarm set points and the alarm delay time.
- (10) Following initial adjustment of the system, the permittee shall not adjust the sensitivity / range, averaging period, alarm set points, or alarm delay time (except as detailed in the OM&M Plan).

In no case may the sensitivity be increased by more than 100 percent or decreased more than fifty (50) percent over a 365-day period unless such adjustment follows a complete baghouse inspection demonstrates that the baghouse is in good operating condition.

- (b) *For a COMS* (as applicable):
 - (1) The permittee shall install, calibrate, maintain and operate a COMS that measures and records the opacity of emissions exiting each exhaust stack.
 - (2) Each COMS must meet the design and installation requirements specified in Performance Specification 1 found in Appendix B to 40 CFR Part 60.
- (c) *For the inlet temperature of a Filter House*:
 - (1) The permittee shall install, calibrate, maintain, and operate a device that continuously monitors and records the temperature of the inlet gases to the baghouse consistent with the requirements for a "continuous monitoring system" outlined in 40 CFR Part, 63, Subpart A.
 - (2) The temperature monitoring device must meet the following specifications:
 - (i) The monitoring system must record the temperature in 15-minute block averages. Additionally, the system must calculate and record the average temperature for each 3-hour block period.

- (ii) The recorder response range must include zero and 1.5 times the average temperature established in accordance with 40 CFR 63.1512(n); Subpart RRR.
- (iii) The reference method must be a National Institute of Standards and Technology (NIST) calibrated reference thermocouple-potentiometer system or an alternate reference subject to approval by the MDEQ.
- (d) *For a lime (or other alkaline reagent) injection system:*
 - (1) The permittee shall verify that lime is always free-flowing in accordance with one of the following methods:
 - (i) Inspect each feed hopper / silo at least once each 8-hour period and record the results of each inspection.

If lime is found not to be free-flowing during any of the 8-hour periods, the permittee shall increase the inspection frequency to at least once every 4-hour period for the next three (3) days. The permittee may return to an inspection schedule of at least once every 8-hour period if the corresponding corrective action results in no further blockages of lime during the 3-day period.

- (ii) Install, operate, and maintain a load cell, a carrier gas / lime flow indicator, a carrier gas pressure drop measurement system, or other system to confirm that lime is free-flowing subject to the approval of the MDEQ. If lime is found not to be free-flowing, the permittee shall promptly initiate and complete corrective action.
- (iii) Install, operate, and maintain a device that monitors the concentration of HCl at the outlet of a Filter House subject to the approval of the MDEQ. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the permittee shall promptly initiate and complete corrective action.
- (2) The permittee shall record the lime feeder setting once each day of operation.
- (3) The permittee shall verify that the lime injection rate (in pounds per hour) is no less than ninety (90) percent of the rate established during the most recent performance test required by Condition 5.17 at least once per month. However, the permittee may request from the MDEQ an extension of up to 45 additional days for this verification.

If a monthly check indicates that the lime injection rate is less than 90%, the permittee shall repair or adjust the lime injection system to restore normal operation within forty-five (45) days of the corresponding check.

In the event that a lime feeder is repaired or replaced, the permittee shall calibrate the new lime feeder and restore the lime feed rate (in pounds per hour) to the operating limit established in accordance with Condition 5.18(b) within 45 days of initiating the repair or replacement. However, the permittee may request from the MDEQ and extension of up to 45 additional days to complete the repair / replacement and establish the new lime feeder setting.

(Ref.: 40 CFR 63.1510(f)(1) – (2), (h), and (i); Subpart RRR)

5.16 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall prepare a site-specific test plan that satisfies all of the requirements specified in 40 CFR 63.7(c)(2); Subpart A and must obtain approval of the plan pursuant to the procedures outlined in 40 CFR 63.7; Subpart A <u>prior</u> to conducting the initial performance test required by Condition 5.17.

The permittee shall conduct each performance test under such conditions that the MDEQ specifies based on the representative performance of the applicable process unit for the period being tested. Upon request, the permittee shall make available to the MDEQ such records as may be necessary to determine the conditions of a performance test.

If the permittee wants to conduct a new performance test and establish different operating parameter values, the permittee shall submit a revised site-specific test plan and receive approval from the MDEQ.

(Ref.: 40 CFR 63.1511(a) and (g)(5); Subpart RRR)

5.17 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall demonstrate initial compliance with the PM, HCl, and D/F emission limits calculated in accordance with Condition 3.6 [as well as the common opacity standard specified in Condition 3.7(d) and Condition 3.8(c)] by conducting a performance test no later than one hundred eighty (180) days after the initial start-up of each applicable process unit **and** following approval of the site-specific test plan required by Condition 5.16.

The permittee shall conduct subsequent performance testing once every five (5) years and not to exceed sixty-one (61) months after the most recently completed performance test.

Additionally, the permittee shall meet the following requirements:

- (a) The permittee shall perform a performance test in accordance with the specifications outlined in 40 CFR 63.1511(b) (d), 63.1512(d)(1) (3), (h), and (j)(2); Subpart RRR (as applicable).
- (b) The permittee shall measure (or otherwise determine) and record the total weight of feed / charge to each applicable process unit (i.e. melting furnace; holding furnace; in-line degasser) attributed to a Filter House for each of the three (3) test runs in order to calculate the total weight. If the permittee opts to measure on the basis of aluminum production, the permittee shall measure the weight of aluminum produced by each applicable process unit (instead of the feed / charge weight).

(c) The permittee shall utilize the applicable equations specified in 40 CFR 63.1513(d) and (e), Subpart RRR to determine compliance. However, the permittee shall exclude periods of start-up and shutdown from these specific calculations.

Additionally, the permittee may utilize the applicable PM performance testing required by this condition to demonstrate compliance with the PM (filterable) emission limit specified in Condition 3.9(a).

(Ref.: 40 CFR 63.1511(b), (e), (h), (k), and 63.1513(d) – (f); Subpart RRR) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 5.18 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall establish an operating value (or range of values) for the inlet gas temperature and lime injection rate during each performance test required by Condition 5.17 in accordance with the following requirements:
 - (a) *For the inlet gas temperature*:
 - (1) The permittee shall continuously measure and record the temperature at the inlet to each Filter House every fifteen (15) minutes during the HCl-related performance test and D/F-related performance test;
 - (2) The permittee shall determine and record the 15-minute block average temperatures each of the three (3) 1-hour runs; and
 - (3) The permittee shall determine and record the 3-hour block average of the recorded temperature measurements for the three (3) test runs.
 - (b) *For the lime injection rate*:
 - (1) The permittee shall ensure that lime in the feed hopper / silo is free-flowing at all times;
 - (2) The permittee shall record the feeder setting and lime injection rate for each of the three (3) 1-hour runs for the HCl-related performance test and D/F-related performance test.

If the feed rate setting and lime injection rate varies between the runs, the permittee shall determine and record the average feed rate and average lime injection rate from the three (3) test runs.

(Ref.: 40 CFR 63.1512(n) and (p); Subpart RRR)

5.19 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall demonstrate compliance with Performance Specification 1 found in Appendix B of 40 CFR Part 60 by conducting a corresponding performance evaluation no later than one hundred eighty (180) days after the initial start-up of each Filter House **<u>if</u>** the permittee installs and operates a COMS.

(Ref.: 40 CFR 63.1512(l); Subpart RRR)

5.20 For Emission Points AA-004, AA-010, AA-016, and AA-022, unless otherwise specified herein, the permittee shall demonstrate initial compliance with the PM_{10} , $PM_{2.5}$, VOC, CO, and NO_X emission limits specified in Condition 3.9(b) – (f) by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the initial start-up of the corresponding secondary aluminum production process.

Additionally, the permittee shall meet the following requirements:

- (a) The permittee shall measure and record the total weight of aluminum produced by all applicable process units attributed to a Filter House (i.e. melting furnace; holding furnace; in-line degasser) for each of the three (3) test runs in a performance test.
- (b) The permittee shall utilize the applicable test methods to evaluate the emission of condensable PM concurrent with a PM_{10} (filterable) or $PM_{2.5}$ (filterable) performance test (as applicable).
- (c) The permittee shall evaluate the emission of NO_X, CO, and VOCs concurrently.

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with the requirements of this condition and Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

- 5.21 For Emission Points AA-027, AA-029, AA-035, AA-038, AA-041, AA-042, AA-043, AA-054, AA-056, AA-057, AA-060, AA-062, AA-063, AA-066, and AA-068, the permittee shall install, calibrate, and inspect a continuous monitoring system (CMS) for the specified operating parameter on each of the following sources in accordance with the manufacturer's recommendations:
 - (a) *For a baghouse*: differential pressure;
 - (b) *For a scrubber*: scrubbing liquid flow rate; and
 - (c) *For a source equipped with a mist eliminator*: differential pressure.

The permittee shall operate and maintain the CMS for each device in accordance with the specified manufacturer's instructions / recommendations until such time as the applicable operating limits required by Condition 5.22 are established.

Additionally, the permittee shall inspect each baghouse, wet scrubber, and mist eliminator at the frequency recommended by the manufacturer. However, if no such recommendation is provided by the manufacturer, the permittee shall perform an initial inspection that evaluates the performance capability of each baghouse, wet scrubber, and mist eliminator no later than one hundred eighty (180) days after the initial start-up of each device. Thereafter, the permittee shall perform a routine inspection once every six (6) calendar months.

The permittee shall maintain documentation that details the manufacturer's specifications / recommendations for each device. Additionally, the permittee shall maintain documentation that details the results of each inspection performed on a device, the date / time in which the inspection was performed, and any actions (preventative or maintenance) conducted as a result of an inspection.

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

- 5.22 For Emission Points AA-027, AA-029, AA-035, AA-038, AA-041, AA-042, AA-043, AA-054, AA-056, AA-057, AA-060, AA-062, AA-063, AA-066, and AA-068, the permittee shall establish an operating parameter value (or range of values) as the "operating limit" (or "operating limit range") for each air pollution control device (or device that directly minimizes the emission of a pollutant) in accordance with Condition 5.2(c)(2) during the performance test that demonstrates initial compliance with the corresponding emission limits:
 - (a) <u>For a baghouse</u>: The "operating limit range" shall be the differential pressure drop range that encompasses the average minimum and maximum values measured over the span of the total test runs for the initial PM-related performance test required herein. However, the differential pressure range may be modified based on a subsequent PM-related performance test required herein.
 - (b) <u>For a scrubber</u>: The "operating limit" shall be the minimum scrubbing liquid flow rate that encompasses the average of all flow rate measurements over the span of the total test runs for the initial PM-related performance test required herein and established in accordance with the manufacturer's written instructions. However, the minimum liquid flow rate may be modified based on a subsequent PM-related performance test required herein.
 - (c) <u>For a mist eliminator</u>: The "operating limit" shall be the differential pressure drop range that encompasses the minimum and maximum values established in accordance with the manufacturer's written instructions.

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

5.23 For Emission Points AA-027 and AA-029, the permittee shall demonstrate initial compliance with the respective PM, PM_{10} , and $PM_{2.5}$ emission limits specified in Conditions 3.12 and 3.13 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the initial start-up of each baghouse.

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

5.24 For Emission Points AA-027 and AA-029, the permittee shall demonstrate continuous compliance with the respective emission limits specified in Conditions 3.12 and 3.13 by monitoring and recording the differential pressure drop across each baghouse on a daily basis during active corresponding operations.

If the permittee determines the pressure drop is outside the differential pressure drop range established in accordance with Condition 5.22(a), the permittee shall perform the necessary corrective measures to return a baghouse to the established pressure drop range. Additionally, the permittee shall maintain documentation that details any corrective actions performed on a baghouse as a result of an out-of-range differential pressure reading.

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

5.25 For Emission Points AA-030 through AA-034, the permittee shall monitor and record the total volume (in MMscf) of natural gas combusted by all furnaces combined on both a monthly and rolling 12-month total basis.

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

- 5.26 For Emission Points AA-035, AA-038, AA-041, AA-042, and AA-043, the permittee shall develop, maintain, and implement an "Emissions Capture and Collection System" (ECCS) Monitoring Plan for each applicable system that identifies the following information:
 - (a) The operating parameter(s) to be monitored to ensure the capture efficiency;
 - (b) The explanation as to why the specified parameter(s) is appropriate for demonstrating normal operation;
 - (c) The operating limit(s) for the capture system that represent the conditions indicative of proper operation and maintenance of the capture system; and;
 - (d) The specific monitoring procedures; and
 - (e) A schematic showing the units, associated vent system, associated monitoring devices, and potential bypasses that could divert gases away from the vent system and/or air pollution control device (or the device that directly minimizes the emission of a pollutant).

As deemed necessary, the permittee shall revise the capture system monitoring plan to address changes to applicable operations and/or to incorporate additional best management practices.

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

5.27 For Emission Points AA-035, AA-038, AA-054, and AA-060, the permittee shall demonstrate continuous compliance with the respective emission limits specified in

Conditions 3.16, 3.18, and 3.24 by continuously monitoring and recording the differential pressure drop across each mist eliminator based on a 3-hour block average.

If the permittee determines the pressure drop is outside of the differential pressure drop range established in accordance with Condition 5.22(c), the permittee shall perform the necessary corrective measures to return the mist eliminator(s) to the established pressure drop range. Additionally, the permittee shall maintain documentation that details any corrective actions performed on a mist eliminator as a result of an out-of-range differential pressure reading.

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

5.28 For Emission Points AA-035 and AA-038, the permittee shall monitor and record the total quantity (in tons) of aluminum processed within each mill on both a monthly and rolling 12-month total basis.

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

5.29 For Emission Points AA-035 and AA-038, the permittee shall demonstrate initial compliance with the respective PM, PM₁₀, PM_{2.5}, and VOC emission limits specified in Conditions 3.16 and 3.18 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the initial start-up.

Additionally, the permittee shall meet the following requirements:

- (a) The permittee shall utilize the applicable test methods to evaluate the emission of condensable PM concurrent with a PM_{10} (filterable) or $PM_{2.5}$ (filterable) performance test (as applicable).
- (b) The permittee shall monitor and record the quantity of each lubricant used during each of the three (3) test runs in a performance test. Additionally, the permittee shall maintain documentation that details the VOC content of each lubricant used.

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with the requirements of this condition and Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

5.30 For Emission Points AA-041, AA-042, AA-043, AA-056, AA-057, AA-062, AA-063, AA-066, and AA-068, the permittee shall demonstrate continuous compliance with the respective emission limits specified in Conditions 3.19, 3.20, 3.26, 3.29, and 3.31 by continuously monitoring and recording the scrubbing liquid flow rate for each scrubber based on a 3-hour block average.

If the average scrubbing liquid flow rate falls below the minimum flow rate established in accordance with Condition 5.22(b), the permittee shall perform the necessary corrective

measures to return the flow to a rate at or above the established minimum value. Additionally, the permittee shall maintain documentation that details any corrective actions performed on a scrubber as a result of a below-range scrubbing liquid flow rate.

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

5.31 For Emission Points AA-041, AA-042, and AA-043, the permittee shall demonstrate initial compliance with the respective PM, PM₁₀, PM_{2.5}, and VOC emission limits specified in Conditions 3.19 and 3.20 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the respective initial start-up of each heavy oil scrubber.

Additionally, the permittee shall utilize the applicable test methods to evaluate the emission of condensable PM concurrent with a PM_{10} (filterable) or $PM_{2.5}$ (filterable) performance test (as applicable).

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with the requirements of this condition and Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

5.32 For Emission Points AA-044 through AA-053 and AA-071, the permittee shall maintain a copy of each notification and report submitted to comply with Subpart DDDDD (including all documentation supporting an Initial Notification, Notification of Compliance Status, or compliance report submitted).

(Ref.: 40 CFR 63.7555(a)(1); Subpart DDDDD)

5.33 For Emission Point AA-044 through AA-053, the permittee shall monitor and record the total volume (in MMscf) of natural gas combusted by all furnaces combined on both a monthly and rolling 12-month total basis.

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

5.34 For Emission Points AA-054 and AA-060, the permittee shall monitor and record the total combined area of aluminum strip processed (in Mft²) (one-sided strip surface area) on both a monthly and rolling 12-month total basis.

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

5.35 For Emission Points AA-054, AA-060, and AA-066, the permittee shall demonstrate initial compliance with the respective PM, PM₁₀, PM_{2.5}, and VOC emission limits specified in Conditions 3.24 and 3.29 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the respective initial start-up of each mist eliminator.

Additionally, the permittee shall utilize the applicable test methods to evaluate the emission of condensable PM concurrent with a PM_{10} (filterable) or $PM_{2.5}$ (filterable) performance test (as applicable).

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

5.36 For Emission Point AA-055 and AA-061, the permittee shall monitor and record the total volume (in MMscf) of natural gas combusted by both furnaces combined on both a monthly and rolling 12-month total basis.

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

5.37 For Emission Points AA-056, AA-057, AA-062, AA-063, and AA-068, the permittee shall demonstrate initial compliance with emission limits specified in Conditions 3.26 and 3.31 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the initial start-up each wet scrubber.

Additionally, the permittee shall utilize the applicable test methods to evaluate the emission of condensable PM concurrent with a PM_{10} (filterable) or $PM_{2.5}$ (filterable) performance test (as applicable).

The permittee shall perform subsequent compliance demonstrations via performance testing in accordance with Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

5.38 For Emission Points AA-058 and AA-064, the permittee shall monitor and record the total volume (in MMscf) of natural gas combusted by both furnaces combined on both a monthly and rolling 12-month total basis.

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

5.39 For Emission Points AA-066 and AA-068, the permittee shall monitor and record the total combined area of aluminum strip processed (in Mft²) (one-sided strip surface area) on both a monthly and rolling 12-month total basis.

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

- 5.40 For Emission Point AA-067, the permittee shall maintain documentation that details the following information for each lubricant used within the process on a monthly basis:
 - (a) The product name or identification;

- (b) The density (in pounds per gallon);
- (c) The volume used (in gallons); and
- (d) The VOC content (by percent weight).

Additionally, the permittee shall calculate and record the total emission of VOCs from the use of lubricants on both a monthly and rolling 12-month total basis.

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

5.41 For Emission Point AA-070, the permittee shall monitor and record the total quantity (in tons) of aluminum coil coated on both a monthly and rolling 12-month total basis.

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

5.42 For Emission Point AA-070, unless otherwise specified herein, the permittee shall demonstrate initial compliance with emission limits specified in Condition 3.33 by conducting a performance test in accordance with Condition 5.2 and no later than one hundred eighty (180) days after the initial start-up of the RTO.

Unless otherwise specified herein, the permittee shall perform subsequent compliance demonstrations via performance testing in accordance with Condition 5.2 once every three (3) years (not to exceed thirty-seven (37) months after the most recently completed performance test).

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

- 5.43 For Emission Point AA-070, the permittee shall demonstrate continuous compliance with the VOC emission limits specified in Condition 3.35 by conducting a performance test each calendar month using the following procedures:
 - (a) <u>Determine the overall reduction efficiency ("R") for the capture system and control</u> <u>device</u>: For the initial performance test, the permittee shall utilize Equations 5 – 7 outlined in 40 CFR 60.463(c)(2)(i)(A) – (C), Subpart TT to determine "R". For subsequent testing, the permittee may use the most recently determined "R" if the thermal oxidizer and capture system operating conditions have not changed since the most recent test.

In the event that the permittee elects to operate the thermal oxidizer or an emissions capture system at conditions different from the most recent performance test (or if directed by the MDEQ), the permittee shall repeat the determination of "R" by utilizing Equations 5 – 7 to determine "R".

If "**R**" is equal to or greater than 0.90, the permittee is in compliance and no further computations are necessary.

If " \mathbf{R} " is less than 0.90, the permittee shall demonstrate compliance with the limit specified in Condition 3.35 by computing the average total VOC emissions to the atmosphere per unit volume of coating solids applied ("N") in accordance with the procedure outlined in paragraphs (b) – (c) of this condition.

- (b) <u>Calculate the volume-weighted average of the total mass of VOCs per unit volume of coating solids applied ("G")</u>: The permittee shall calculate "G" for each calendar month by utilizing Equations 1 3 outlined in 40 CFR 60.463(c)(1)(i)(A) (C), Subpart TT.
- (c) <u>Calculate the volume-weighted average of VOC emissions to the atmosphere ("N")</u>: The permittee shall calculate "N" for each calendar month by utilizing the following equation:

$$\mathbf{N} = \mathbf{G} \cdot (1 - \mathbf{R})$$

If "*N*" is less than or equal to 0.14 kilograms of VOCs per liter of coating solids applied, the permittee is in compliance.

(Ref.: 40 CFR 60.463(c)(2); Subpart TT)

5.44 For Emission Point AA-070, the permittee shall calculate and record the average VOC content of coatings applied (in kilograms per liter) **<u>if</u>** the overall reduction efficiency ("**R**") is less than 0.90 [as determined by Condition 5.43(a)] on a monthly basis.

Additionally, the permittee shall maintain the following information for each calendar month:

- (a) The composition of each coating applied and each VOC-based solvent added to a coating (including how the VOC content was determined);
- (b) The volume (in gallons) of each coating applied; and
- (c) The mass fraction of each VOC-based solvent added a coating.

(Ref.: 40 CFR 60.463(c)(1) and 60.464(a); Subpart TT)

5.45 For Emission Point AA-070, the permittee shall install, calibrate, maintain, and operate temperature monitoring equipment in accordance with the manufacturer's specifications. The permittee shall either calibrate the chart recorder, data logger, or temperature indicator every three (3) months or replace the monitoring equipment.

The permittee shall replace the equipment either if it is chosen not to perform the calibration or if the equipment cannot be 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 $\pm 1^{\circ}$ C (whichever is greater), any temperature observed outside of this range will be a deviation from the

operating limit. Additionally, the permittee shall install the thermocouple or temperature sensor in the combustion chamber at a location in the combustion zone.

The permittee shall record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the thermal incinerator used to control emissions remains more than 28° C (50° F) below the temperature at which compliance with Condition 3.35 was demonstrated during the most recent measurement of incinerator efficiency required by 40 CFR 60.8; Subpart A. The records required by 40 CFR 60.7; Subpart A shall identify each such occurrence and its duration.

(Ref.: 40 CFR 60.464(c); Subpart TT) (Ref.: 40 CFR 63.5150(a)(3)(i), (ii), and 63.5150(b); Subpart SSSS)

5.46 For Emission Point AA-070, the permittee shall maintain for a period of at least two (2) years documentation on all data and calculations used to determine the monthly VOC emissions and the monthly emission limit (where applicable). Additionally, the permittee shall maintain daily records on the incinerator combustion temperature.

(Ref.: 40 CFR 60.465(e); Subpart TT)

- 5.47 For Emission Point AA-070, permittee shall determine and maintain the following information (as applicable):
 - (a) *For The Coating Materials Applied*:
 - (1) <u>Organic HAP content</u>: The permittee shall determine the organic HAP weight fraction of each coating material applied by utilizing one (1) of the procedures in outlined 40 CFR 63.5160(b)(1) (4); Subpart SSSS.
 - (2) <u>Solids content and density</u>: The permittee shall determine the solids content (by volume) and density of each coating material applied by utilizing an appropriate ASTM test method outlined in 40 CFR 63.5160(c), Subpart SSSS (or an EPA-approved alternative method as applicable). The manufacturer of an applicable material may also perform the specified testing and provide the results to the permittee.

Additionally, the permittee may rely on the formulation data provided by a material provider to determine the solids content. However, in the event of any inconsistency between test data obtained with an appropriate test method and formulation data, the test data will govern.

- (b) *For The Control Device (Thermal Oxidizer)*:
 - <u>Destruction / Removal Efficiency</u>: The permittee shall establish the destruction / removal efficiency by conducting an initial performance test no later than one hundred eighty (180) days after the initial start-up of the coil coating process. Thereafter, the permittee shall conduct subsequent testing no later than five (5)

years after the previous test completed that re-establishes the destruction / removal efficiency.

Each test shall be performed such that the inlet and outlet of the thermal oxidizer is evaluated simultaneously in accordance with the specifications outlined in 40 CFR 63.5160(d)(1)(i) - (x), Subpart SSSS.

The permittee shall conduct each performance test under representative operating conditions. Operations during periods of start-up, shutdown, or nonoperation do not constitute representative conditions for the purpose of a performance test. Moreover, the permittee may not conduct a performance test during periods of malfunction. The permittee shall record and maintain all applicable process information that is necessary to document operating conditions during a test and explain why the conditions represent normal operation.

Additionally, the permittee may utilize the evaluation of VOC emissions at the outlet of the thermal oxidizer as required by this paragraph to demonstrate compliance with the VOC emission limit specified in Condition 3.33(d).

- (2) <u>Operating Limits</u>: The permittee shall establish a minimum combustion temperature as the operating limit during each performance test required by paragraph (b)(1) of this condition and in accordance with 40 CFR 63.5160(d)(3)(i), Subpart SSSS.
- (c) *For The Coating Equipment [i.e. Coating Stations and Oven(s)]*:
 - (1) <u>Capture System</u>: The permittee shall develop a "Capture System Monitoring Plan" for each system that identifies the following information:
 - (i) The operating parameter (or range of values) to be monitored to ensure that the capture efficiency determined by paragraph (c)(2) of this condition;
 - (ii) The explanation as to why the specified parameter (or range of values) is appropriate for demonstrating on-going compliance;
 - (iii) The operating limit(s) for the capture system; and
 - (iv) The specific monitoring procedures.
 - (2) <u>Capture Efficiency</u>: The permittee shall determine the capture efficiency for the capture system of each work-station or oven by utilizing one of the following methods (as applicable):
 - (i) For an enclosure that meets the criteria for a permanent total enclosure (PTE), the permittee may assume it achieves 100% capture efficiency.

However, the permittee must confirm that the capture system is a PTE by demonstrating that it meets the requirements outlined in Section 6 of EPA Test Method 204 (or an EPA-approved alternative method) and that all exhaust gases from the enclosure are delivered to the thermal oxidizer.

- (ii) The permittee may determine the capture efficiency in accordance with the protocols for testing with temporary total enclosures specified in EPA Test Methods 204A through F. However, the permittee may exclude never-controlled work-stations from such capture efficiency determinations.
- (iii) The permittee may use any capture efficiency protocol and test methods that satisfy the criteria of either the "Data Quality Objective" or the "Lower Confidence Limit" approach as described in Appendix A of 40 CFR Part 63, Subpart KK – National Emission Standards for the Printing and Publishing Industry. However, the permittee may exclude nevercontrolled work-stations from such capture efficiency determinations.

(Ref.: 40 CFR 63.5150(a)(4) and 63.5160(b) – (e); Subpart SSSS) (Ref.: 11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).)

- 5.48 For Emission Point AA-070, the permittee shall use one (1) of the following options to comply with an emission limit specified in Condition 3.37 (as applicable):
 - (a) <u>Capture and control to reduce emissions to no more than the allowable limit</u>: The permittee can demonstrate compliance with an emission limit specified in Condition 3.37(a) through (c) (40 CFR 63.5120(a); Subpart SSSS) by following one of the procedures outlined in 40 CFR 63.5170(c)(1) (4); Subpart SSSS.
 - (b) <u>Capture and control to achieve the emission rate limit</u>: The permittee shall demonstrate compliance with Condition 3.37(b) (40 CFR 63.5120(a); Subpart SSSS) by following one (1) of the procedures outlined in 40 CFR 63.5170(d)(1) (3); Subpart SSSS.

(Ref.: 40 CFR 63.5170(c) and (d); Subpart SSSS)

- 5.49 For Emission Point AA-070, the permittee shall maintain documentation that details the following information:
 - (a) Records on the coating line in which each compliance option was used and the time periods (i.e. the beginning and ending dates / times) each option was used;
 - (b) Records specified in 40 CFR 63.10(b)(2); Subpart A on all measurements needed to demonstrate compliance with Subpart SSSS that shall also include the following information:
 - (1) The thermal oxidizer and capture system operating parameter data in accordance with Conditions 5.45 and 5.47;

- (2) The data on the organic HAP content for the purpose of demonstrating compliance in accordance with 40 CFR 63.5160(b), Subpart SSSS;
- (3) The data on the volatile matter and solids content for the purpose of demonstrating compliance in accordance with 40 CFR 63.5160(c), Subpart SSSS;
- (4) The overall control efficiency determination or the alternative outlet HAP concentration using capture efficiency tests and control device destruction / removal efficiency tests conducted in accordance with 40 CFR 63.5160(d) and (e), Subpart SSSS; and
- (5) The material usage, HAP usage, volatile matter usage, solids usage, and compliance demonstrations using these data in accordance with 40 CFR 63.5170(d); Subpart SSSS.
- (c) Records specified in 40 CFR 63.10(b)(3), Subpart SSSS; and
- (d) For each deviation from an emission limit, the permittee shall maintain the following information:
 - (1) The date, time, and duration of each deviation;
 - (2) A list of the sources for which the deviation occurred and the cause of each deviation;
 - (3) An estimate on the quantity of each regulated pollutant emitted over the emission limit specified in Condition 3.37 or any operating limit specified in Condition 3.38 as well as a description of the method used to calculate the estimate.

(Ref.: 40 CFR 63.5190(a)(1) – (3) and (5); Subpart SSSS)

5.50 For Emission Point AA-070, the permittee shall maintain electronic copies of any report required to be submitted via EPA's CEDRI (Compliance and Emissions Data Reporting Interface). However, the ability to maintain electronic copies does not affect the requirement for the permittee to make records, data, and reports available upon request to the MDEQ or the EPA as part of an on-site compliance evaluation.

(Ref.: 40 CFR 63.5190(c); Subpart SSSS)

5.51 For Emission Point AA-071, the permittee shall monitor and record the amount of natural gas combusted during each calendar month.

(Ref.: 40 CFR 60.48c(g)(2); Subpart Dc)

5.52 For Emission Points AA-072 through AA-075, the permittee shall monitor and record the total dissolved solids (TDS) content of the recirculating water within each cooling tower once every quarter calendar period.

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

5.53 For Emission Points AA-076 through AA-079, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation for each engine on a monthly basis for both emergency and non-emergency service. Additionally, the permittee shall detail (in writing) and maintain what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 60.4214(b); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 5.54 For Emission Points AA-076 through AA-079, the permittee shall maintain documentation that details the following information:
 - (a) All notifications submitted must comply with Subpart IIII;
 - (b) Any maintenance conducted on an engine; and
 - (c) Documentation from the manufacturer that indicates an engine is certified to meet the emission standards specified in either Condition 3.45 or Condition 3.47.

(Ref.: 40 CFR 60.4114(a)(2); Subpart IIII)

- 5.55 For Emission Points AA-076 through AA-079, the permittee shall demonstrate compliance through the emission standards specified in Condition 3.45 or Condition 3.47 through the following actions **if** the permittee does not operate and maintain the engine according to the manufacturer's emission-related written instructions or the permittee changes emission-related settings in a way that is not permitted by the manufacturer:
 - (a) Keep a maintenance plan, records of conducted maintenance, and (to the extent practicable) maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - (b) <u>For Emission Point AA-079</u>: The permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards in accordance with one of the following deadlines:
 - (1) Within one (1) year of start-up; or
 - (2) Within one (1) year after the engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions; or
 - (3) Within one (1) year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer.

(c) <u>For Emission Points AA-076 through AA-078</u>: In addition to paragraphs (a) and (b) of this condition, the permittee shall conduct subsequent performance testing either every 8,760 hours of engine operation or three (3) years (whichever comes first).

Any required performance test shall be conducted in accordance with the procedures outlined in 40 CFR 60.4212(a) - (c); Subpart IIII (as applicable).

(Ref.: 40 CFR 60.4211(g)(2) and (3); Subpart IIII)

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-000 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1(a)	Report a Deviation Within Five (5) Working Days
		6.1(b)	Semi-Annual Reporting Requirements
		6.1(c)	Certification by Responsible Official
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).	6.1(d)	Notification of Beginning Actual Construction Within 15 Days
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).	6.1(e)	Submit a Notification When Construction Does Not Begin or is Suspended
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).	6.1(f)	Submit a Certification on Completion of Construction Prior to Operation
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).	6.1(g)	Submit a Notification on Changes in Construction
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.2	Submit a Notification on the Initial Start-Up of "Facility Operations" and Devices
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.3	Submit Performance Test-Related Notifications, Information, and/or Reports (As Applicable)
	40 CFR 63.1516(b)(3)(i)(A); Subpart RRR	6.4	Submit Performance Test Results to EPA via CEDRI
	40 CFR 63.5181(a)(1); Subpart SSSS		
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.5	Submit the Initial Applicable Plans
		6.6	Submit a Semi-Annual Monitoring Report
AA-001 through AA-004	40 CFR 63.1515(a)(3); Subpart RRR	6.6	Submit Notifications on the Commencement of Construction and Start-Up
AA-007 through			
AA-010 AA-013			
through AA-016			
AA-019 through AA-022			

SECTION 6. REPORTING REQUIREMENTS

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Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-001 through AA-004	40 CFR 63.1515(a)(3); Subpart RRR	6.7	Submit Notifications for Each Applicable Unit
AA-007 through AA-010	40 CFR 63.1510(b); Subpart RRR	6.8	Submit the Initial OM&M Plan for Approval
AA-013 through AA-016	40 CFR 63.1515(b); Subpart RRR	6.9	Submit a Notification of Compliance Status Report
AA-019 through AA-022	40 CFR 63.1516(b)(1), (2)(vi) – (vii), and (4); Subpart RRR	6.10	Submit a Semi-Annual Compliance Report
AA-004 AA-010 AA-016 AA-022	40 CFR 63.1511(a); Subpart RRR 40 CFR 63.7(b)(1); Subpart A	6.11	Submit the Site-Specific Test Plan for Approval
	40 CFR 63.1515(a)(6); Subpart RRR	6.12	Submit a Notification on the Intent to Conduct a Performance Test or Visible Emissions Observation
AA-070	40 CFR 60.465(d); Subpart TT	6.13	Submit a Semi-Annual Deviation Report
	40 CFR 63.5180(b); Subpart SSSS	6.14	Submit an Initial Notification for the Applicable Unit
	40 CFR 63.5180(c) and (e); Subpart SSSS	6.15	Submit a Notification of Performance Test and the Performance Test Results
	40 CFR 63.5180(d); Subpart SSSS	6.16	Submit a Notification of Compliance Status Report
	40 CFR 63.5180(g)(1)(v), (2), and (h); Subpart SSSS	6.17	Submit a Semi-Annual Compliance Report
	40 CFR 63.5181(c); Subpart SSSS	6.18	CEDRI Report Requirements

6.1 General Reporting Requirements:

(a) 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. The report shall be made within five (5) working days of the time the deviation began.

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

(b) Beginning upon issuance of this permit and lasting until issuance or modification of the applicable operating permit, the permittee shall submit reports of any required

monitoring by August 29 and March 1 (or February 29 when applicable) of each calendar year for the preceding six-month period (i.e. January 1 – June 30; July 1 – December 31).

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 Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 2.1.C.

Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration. For any air emissions equipment not yet constructed and/or operating the report shall so note and include an estimated date of commencement of construction and/or start-up (whichever is applicable).

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

(c) Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official stating 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. 2.2.B.(11).)

(d) Within fifteen (15) days of beginning actual construction, the permittee must notify MDEQ in writing that construction has begun.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(2).)

(e) The permittee must notify the MDEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(3).)

(f) Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board no later than fifteen (15) days after the actual event.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(1) and (3).)

(g) The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications.

Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(2).)

- 6.2 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall notify the MDEQ on the initial start-up of the following items no later than fifteen (15) days after the actual start-up date:
 - (a) The initial start-up of a collective process specified as a "Facility Operation" in Section 2 of this permit;
 - (b) The initial start-up of each air pollution control device (or device that directly minimizes a pollutant).

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

- 6.3 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall submit the following notifications, information, and/or reports for any performance test required herein to the MDEQ in accordance with the specified deadline:
 - (a) A written test protocol shall be submitted to the MDEQ no later than sixty (60) days prior to the intended test date that details all proposed test methods and procedures. If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.
 - (b) A notification about the testing event shall be submitted to the MDEQ no later than ten (10) days prior to the scheduled date(s) so that an observer may be afforded the opportunity to witness the test(s).
 - (c) The test results from a performance test shall be submitted to the MDEQ no later than sixty (60) days after completing the actual test. Additionally, the permittee shall submit a summary of the results for any required parametric monitoring required by Condition 5.22 (as applicable).

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

6.4 For Emission Point AA-000 (Facility-Wide), the permittee shall submit the results from any performance test / visible emissions observation required by Subpart RRR or Subpart SSSS (as applicable) to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*).

Additionally, the permittee shall submit the performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(Ref.: 40 CFR 63.1516(b)(3)(i)(A); Subpart RRR and 40 CFR 63.5181(a)(1); Subpart SSSS)

- 6.5 For Emission Point AA-000 (Facility-Wide), the permittee shall submit the following plans to the MDEQ in accordance with the specified deadline:
 - (a) The permittee shall submit the initial "GCOMP Plan" required by Condition 5.3 no later than (60) days after certifying the collective completion of construction for all natural gas-fired process units that are both subject to short-term emission limits <u>and</u> "good combustion, operational, and maintenance practices" as the corresponding compliance demonstration;
 - (b) <u>For Emission Points AA-035, AA-038, AA-041, AA-042, and AA-043</u> the permittee shall submit the initial "ECCS Monitoring Plan" required by Condition 5.26 for each applicable system no later than sixty (60) days after the initial start-up of each unit; and
 - (c) <u>For Emission Point AA-070</u> the permittee shall submit the "Capture System Monitoring Plan" required by Condition 5.47(c)(1) no later than sixty (60) days after completing the destruction / removal efficiency performance test required by Condition 5.47(b).

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

- 6.6 For Emission Points AA-000 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) in accordance with Condition 6.1(b) that contains the following information:
 - (a) <u>For Emission Points AA-001 through AA-003, AA-007 through AA-009, AA-013</u> <u>through AA-015, and AA-019 through AA-021</u> – the total quantity (in tons) of aluminum produced by each "*melting and casting line*" on both a monthly and rolling 12-month total basis;
 - (b) For Emission Points AA-030 through AA-034, AA-043 through AA-053, AA-055 and AA-061 (combined), AA-058 and AA-064 (combined) – the total volume (in MMscf) of natural gas combusted by each group of units on both a monthly and rolling 12month total basis;
 - (c) <u>For Emission Point AA-035 and AA-038</u> the total quantity (in tons) of aluminum processed within each mill on both a monthly and rolling 12-month total basis;
 - (d) <u>For Emission Points AA-054 and AA-060</u> the respective combined area (in Mft²) of aluminum strip processed and/or cleaned (one-sided strip surface area) on both a monthly and rolling 12-month total basis;
 - (e) <u>For Emission Points AA-066 and AA-068</u> the respective combined area (in Mft²) of aluminum strip processed and/or cleaned (one-sided strip surface area) on both a monthly and rolling 12-month total basis;

- (f) <u>For Emission Point AA-070</u> the total quantity (in tons) of aluminum coil coated on both a monthly and rolling 12-month total basis;
- (g) <u>For Emission Points AA-076 through AA-079</u> the hours of operation for each emergency engine (including a summary on how many hours are spent for emergency operation, what classified the operation as an emergency situation, how many hours are spent for non-emergency operation, and the circumstance(s) for non-emergency operation)
- (h) A summary on any revision(s) made to the "GCOMP Plan", a respective "ECCS Monitoring Plan", or the "Capture System Monitoring Plan" during the reporting period;
- (i) A summary for each parametric continuous monitoring system (CMS) that provides the following information (as applicable):
 - (1) <u>Operation Outside Operating Limit / Operating Limit Range</u> the specific emission source, the date, the beginning and ending times, the cause(s) for each excursion; and any corrective action taken as a result of the excursion; and
 - (2) <u>CMS Downtime</u> the specific emission source, the date, the beginning and ending times, the cause(s) for each downtime event; and any corrective action taken as result of a downtime event.

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

- 6.7 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall submit a notification to the MDEQ that details the following information no later than thirty (30) days after the actual event:
 - (a) The date in which construction on an applicable unit begins;
 - (b) The anticipated date of start-up for a unit; and
 - (c) The actual date of start-up for a unit.

(Ref.: 40 CFR 631515(a)(3); Subpart RRR)

6.8 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall submit the initial OM&M Plan required by Condition 5.4 to the MDEQ for approval no later than ninety (90) days after a successful initial performance test required by Condition 5.17.

(Ref.: 40 CFR 63.1510(b); Subpart RRR)

6.9 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall submit a "Notification of

Compliance Status" report signed and certified by a responsible official to the MDEQ no later than ninety (90) days after conducting the initial performance test required by Condition 5.17.

For the report to be deemed complete, the permittee shall include the following information:

- (a) All information required by 40 CFR 63.9(h), Subpart A;
- (b) A complete performance test report for each process unit (or group of process units) for which a performance test is required by Subpart RRR [a complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests)];
- (c) Unit labeling as described in Condition 4.3 (including the furnace classification and operating requirements);
- (d) The compliant operating parameter value (or range of values) established for each applicable process unit with supporting documentation as well as a description of the procedure used to establish the value(s) (e.g. lime injection rate; total reactive chlorine flux injection rate; fabric filter inlet temperature) and the operating cycle or time period used in the initial performance test required by Condition 5.17;
- (e) The design information and corresponding analysis (including supporting documentation) that demonstrates conformance with the requirements for an emissions capture / collection systems specified in Condition 5.7;
- (f) The analysis (including supporting documentation) that demonstrates conformance with EPA guidance and specifications for a bag leak detection system specified in Condition 5.15; and
- (g) The OM&M Plan required by Condition 5.4.

For this purpose of this condition, the required information may be submitted in an operating permit application, in an amendment to an operating permit application (in a separate submittal), or in any combination. If the permittee submits the required information at different times or in different submittals, the permittee may refer to an earlier submittal within the later submittal of duplicating and resubmitting the information previously submitted.

(Ref.: 40 CFR 63.1515(b); Subpart RRR)

6.10 For Emission Points AA-001 through AA-004, AA-007 through AA-010, AA-013 through AA-016, and AA-019 through AA-022, the permittee shall submit a semi-annual compliance report to the MDEQ and EPA in accordance with Condition 6.1(b) that includes the following information (as applicable):

- (a) Any corrective action not initiated within one (1) hour of a bag leak detection system alarm;
- (b) Any corrective action not initiated within one (1) hour of COMS deviation;
- (c) Any excursion of a compliant process or operating parameter value (or range of values) (e.g. lime injection rate or screw feeder setting; total reactive chlorine flux injection rate; baghouse inlet temperature; the definition of "acceptable scrap");
- (d) Any source (including an emission unit in a secondary aluminum processing unit) was not operated in accordance with the requirements of Subpart RRR;
- (e) A deviation from the 3-day, 24-hour rolling average emission limit calculated for a secondary aluminum processing unit in accordance with Condition 3.6;
- (f) If a holding furnace and/or in-line degasser in-line degasser does not use a reactive flux during a reporting period, the permittee shall include the following certification:

"Only non-reactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period."

(g) If the permittee opts to demonstrate compliance during periods of start-up and shutdown in accordance with 40 CFR 63.1513(f)(1); Subpart RRR, the permittee shall include the following certification:

"During each start-up and shutdown, no flux and no feed / charge were added to a process unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated."

- (h) If there is a malfunction during the reporting period, the permittee shall include the following information:
 - (1) The emission unit identification and/or the monitor identification;
 - (2) The pollutant or parameter monitored;
 - (3) The beginning and ending date / time of each event;
 - (4) The cause of the deviation (or exceedance) as well as the corrective action taken for each malfunction that occurred and which caused (or may have caused) any applicable emission limit to be exceeded;
 - (5) An estimate of the quantity for each regulated pollutant emitted over an applicable emission limit as well as a description of the method used to estimate the emissions including (but not limited to) product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters; and

(6) A description of any actions taken by the permittee during a malfunction to minimize emissions in accordance with Condition 4.1.

When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

(Ref.: 40 CFR 63.1516(b)(1), (2)(vi) – (vii), and (4); Subpart RRR)

6.11 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall submit the site-specific test plan required by Condition 5.16 to the MDEQ for approval no later than sixty (60) days prior any initial performance test required by Condition 5.17.

(Ref.: 40 CFR 63.1511(a); Subpart RRR and 40 CFR 63.7(b)(1); Subpart A)

6.12 For Emission Points AA-004, AA-010, AA-016, and AA-022, the permittee shall submit a notification on the intent to conduct a performance test required by Condition 5.17 to the MDEQ and EPA no later than sixty (60) days before the test is scheduled.

Additionally, the permittee shall submit a notification in accordance with 40 CFR 63.9(f); Subpart A (as applicable) on the intent to conduct a visible emissions observation required by Condition 5.17 to the MDEQ and EPA no later than thirty (30) days before the observation is scheduled to take place.

(Ref.: 40 CFR 63.1515(a)(6); Subpart RRR)

- 6.13 For Emission Point AA-070, the permittee shall submit a deviation report in accordance with Condition 6.1(b) that contains the following information:
 - (a) Each instance in which the volume-weighted average of the mass of VOCs emitted to the atmosphere per volume of applied coating solids ("N") is greater than the limit specified in Condition 3.35.
 - (b) Each instance in which the combustion temperature of the thermal oxidizer drops below the minimum temperature established by Condition 5.42.

If no such periods occur, the permittee shall state as such in the report.

(Ref.: 40 CFR 60.465(d); Subpart TT)

6.14 For Emission Point AA-070, the permittee shall submit an initial notification in accordance with 40 CFR 63.9(b)(4); Subpart A.

(Ref.: 40 CFR 63.5180(b); Subpart SSSS)

- 6.15 For Emission Point AA-070, the permittee shall submit the following information to the MDEQ in accordance with the specified deadlines:
 - (a) The permittee shall submit a "Notification of Performance Test" for any performance test required by Condition 5.47(b)(1) no later than sixty (60) calendar days prior to

the performance test is scheduled to begin. The notification and the site-specific test plan (as required by 40 CFR 63.7(c)(2); Subpart A) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained.

The permittee may consider the operating parameter identified in the site-specific test plan to be approved unless explicitly disapproved or unless comments received from the MDEQ require monitoring of an alternate parameter.

(b) The permittee shall submit the results from a performance test required by Condition 5.47(b)(1) to the MDEQ no later than sixty (60) days after the completion of the performance test.

(Ref.: 40 CFR 63.5180(c) and (e); Subpart SSSS)

6.16 For Emission Point AA-070, the permittee shall submit a "Notification of Compliance Status" report in accordance with 40 CFR 63.9(h); Subpart A no later than thirty (30) calendar days after the end of the initial 12-month compliance period.

(Ref.: 40 CFR 63.5180(d); Subpart SSSS)

- 6.17 For Emission Point AA-070, the permittee shall submit a semi-annual compliance report in accordance with Condition 6.1(b) that contains the following information:
 - (a) The identification of the compliance option or options used during the reporting period. If the permittee switched between compliance options during the reporting period, the permittee shall report the beginning dates for each option.
 - (b) A statement that indicates there were no deviations from the applicable organic HAP emission limit specified in Condition 3.37 or the applicable operating limits established in accordance with Condition 3.38 during the reporting period.
 - (c) For each deviation of an applicable emission limit or any applicable operating limit, the report shall include the following information:
 - (1) The total operating time of the coating line during the reporting period;
 - (2) The number, date, time, duration, and cause of deviation from a compliance option or any applicable operating limit established in accordance with Condition 3.37 (including an unknown cause if applicable), and any corrective action taken;
 - (3) The number, date, time, duration, cause (including an unknown cause), and descriptions of corrective actions taken for continuous parameter monitoring systems that are inoperative;
 - (4) The number, date, time, duration, cause (including an unknown cause), and descriptions of corrective actions taken for continuous parameter monitoring

systems that are out of control as specified in 40 CFR 63.8(c)(7), Subpart A; and

(5) A list of the equipment, an estimate on the quantity of each regulated pollutant emitted over the applicable emission limit, a description of the method used to estimate the emissions, and the actions taken to minimize emissions in accordance with Condition 4.1.

(Ref.: 40 CFR 63.5180(g)(1)(v), (2), and (h); Subpart SSSS)

6.18 For Emission Point AA-070, the permittee shall submit the semi-annual compliance report required by Subpart SSSS to the EPA via the CEDRI website no later than one (1) year after the reporting template specific to Subpart SSSS has been available. The CEDRI interface can be accessed through the EPA's CDX: <u>https://cdx.epa.gov</u>.

If the reporting form for the semi-annual compliance report specific to Subpart SSSS is not available in CEDRI at the time that this report is due, the permittee shall submit the report to the EPA at the appropriate address listed in 40 CFR 63.13, Subpart A. The permittee shall refer to 40 CFR 63.5181(c), Subpart SSSS for additional requirements pertaining to the electronic submittal of semi-annual compliance reports.

(Ref.: 40 CFR 63.5181(c); Subpart SSSS)