



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: January 27, 2020

Effective Date: June 25, 2026

Revision Date: June 3, 2026

Expiration Date: November 25, 2026

Revision Type: Extension

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 09-0244

Federal Tax Id - Plant Code: 83-4579882-1

Owner Information

Name: MM METALS USA LLC

Mailing Address: 53 MIDDLE DR
FAIRLESS HILLS, PA 19030-5018

Plant Information

Plant: MM METALS/FALLS

Location: 09 Bucks County 09002 Falls Township

SIC Code: 3312 Manufacturing - Blast Furnaces And Steel Mills

Responsible Official

Name: VINCE DAGRAVA

Title: EHS MANAGER

Phone: (267) 789 - 5433

Email: vd@mmmetalsusa.com

Plan Approval Contact Person

Name: VINCE DAGRAVA

Title: EHS MANAGER

Phone: (610) 915 - 2101

Email: vd@mmmetalsusa.com

[Signature] _____

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



Plan Approval Description

- (a) AUTH ID 1283636: This plan approval is for the construction of a new low-carbon ferrochrome alloy manufacturing facility to be located in the Keystone Industrial Port Complex (KIPC) in Falls Township, Bucks County, PA.
- (b) AUTH ID 1322802: This is a minor modification of the plan approval which addresses a change in type of aluminum melt furnace (Source ID 102) and deletion of various supporting equipment. This minor modification supersedes the original plan approval in its entirety.
- (c) AUTH ID 1353064: This is a minor modification of the plan approval which addresses a change to the control device configuration for Source ID 104. Particulate matter from the furnace metal and slag tapping will now be vented to the Chromite Ore Dryer Baghouse (C103). This minor modification supersedes the previous plan approval modification in its entirety.
- (d) AUTH ID 1443084: This is a minor modification of the plan approval to replace the plasma arc furnace associated with Source ID 104 (Low Carbon Ferrochrome Production), now listed as Source ID 104A.



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Note: These same sub-sections are repeated for each source!

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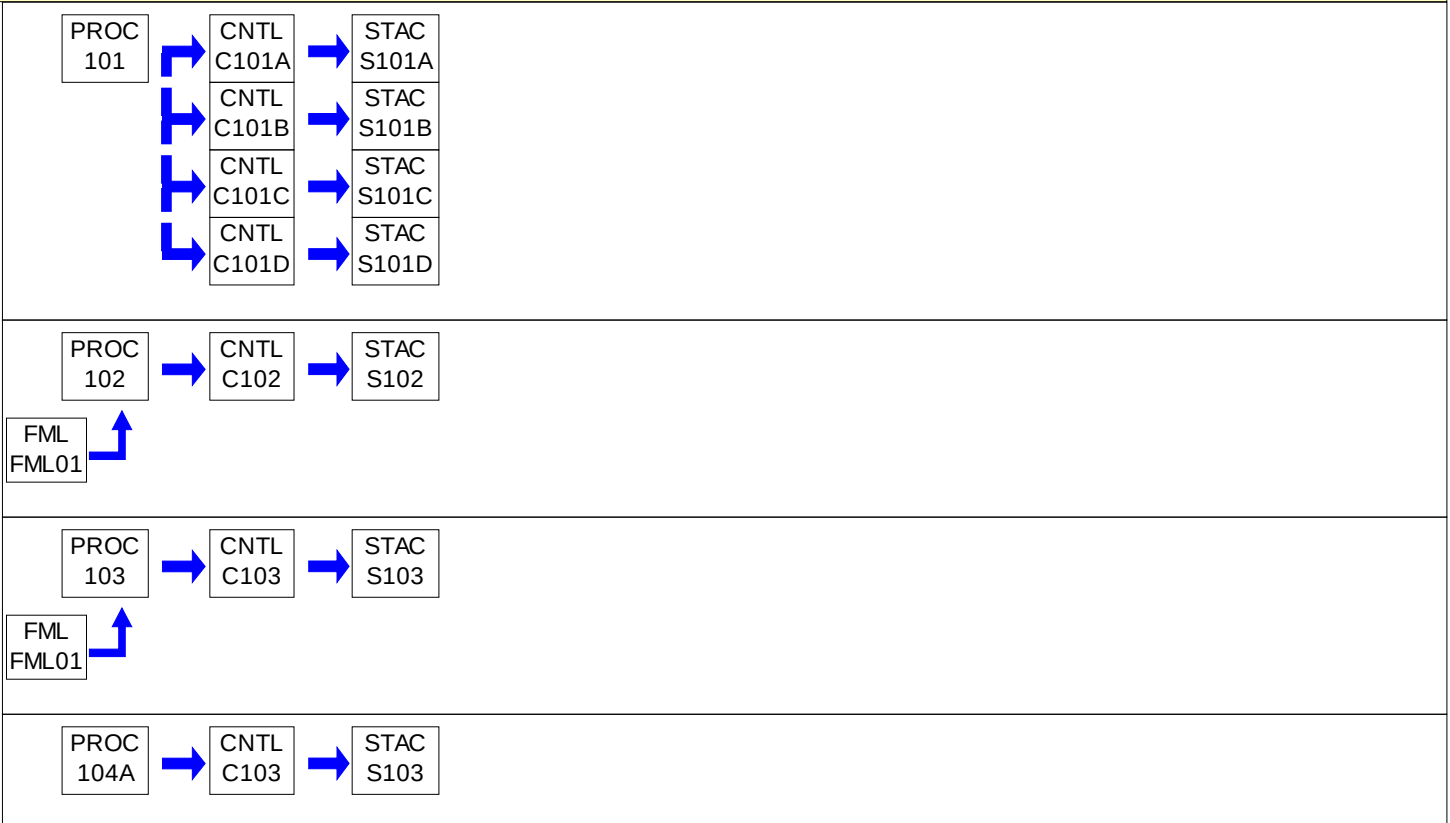
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	RAW MATERIAL HANDLING	N/A	
102	ALUMINUM PRODUCTION	N/A	
		N/A	Natural Gas
103	CHROMITE ORE DRYER	N/A	Natural Gas
		N/A	
104A	LOW CARBON FERROCHROME PRODUCTION	N/A	Natural Gas
C101A	LIME SILO BIN VENT		
C101B	SAND SILO BIN VENT		
C101C	ALUMINUM GRIT SILO BIN VENT		
C101D	CHROMITE SILO BIN VENT		
C102	ALUMINUM PRODUCTION BAGHOUSE WITH LIME INJECTION		
C103	CHROMITE ORE DRYER BAGHOUSE		
FML01	NATURAL GAS		
S101A	LIME SILO BIN VENT EXHAUST		
S101B	SAND SILO BIN VENT EXHAUST		
S101C	CHROMITE ORE SILO BIN VENT EXHAUST		
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PERMIT MAPS

**SECTION B. General Plan Approval Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]**Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]**Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]**Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]**Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

**SECTION B. General Plan Approval Requirements**

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]**Plan Approval Terms and Conditions**

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]**Transfer of Plan Approvals**

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(a)(4) & 35 P.S. § 4008 & § 114 of the CAA]**Inspection and Entry**

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

**SECTION B. General Plan Approval Requirements**

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]**Plan Approval Changes for Cause**

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]**Submissions**

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(a)(9) & 40 CFR Part 68]**Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

**SECTION B. General Plan Approval Requirements**

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

#014 [25 Pa. Code § 127.25]**Compliance Requirement**

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

**SECTION C. Site Level Plan Approval Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (a) Construction or demolition of buildings or structures;
- (b) Grading, paving and maintenance of roads and streets;
- (c) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) Clearing of land;
- (e) Stockpiling of materials;
- (f) Open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) Sources and classes of sources other than those identified in (a)-(f) above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) The emissions are of minor significance with respect to causing air pollution; and
 - (2) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1 (a)(1)-(9), if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

005 [25 Pa. Code §123.41]**Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.
- (b) Equal to or greater than 60% at any time.

006 [25 Pa. Code §123.42]**Exceptions**

The opacity limitations of 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from sources specified in 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain

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fugitive emissions).

007 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall limit the facility-wide HAP emissions as follows:

- (a) Less than 10 tpy of any individual HAP, based on a 12-month rolling sum, and
- (b) Less than 25 tpy of any combination of HAP, based on a 12-month rolling sum.

008 [25 Pa. Code §129.14]**Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except when the open burning operations result from:

- (a) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (b) A fire set for the purpose of instructing personnel in fire-fighting, when approved by the Department.
- (c) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (d) A fire set solely for recreational or ceremonial purposes.
- (e) A fire set solely for cooking food.

II. TESTING REQUIREMENTS.**# 009 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this plan approval, or established pursuant to any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by DEP at such time as it notifies the permittee that testing is required.

010 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

(1) Test Date(s)

- (i) For protocols, provide the proposed date on which testing will commence or "TBD"
- (ii) For reports, provide the first and last day of testing

(2) Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also

**SECTION C. Site Level Plan Approval Requirements**

include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

(3) Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

(4) Testing Requirements (all that apply):

- (i) Plan approval number(s)
- (ii) Applicable federal subpart(s) (i.e. 40 CFR 63 Subpart RRR or 40 CFR Part 63 Subpart YYYYYY)
- (iii) Other special purpose(s) (i.e., Consent Order, RFD, RACT II, Tier II, etc.)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

[NOTE: Test Method 9 and Test Method 22 information such as protocols and reports shall be provided to the Region only, not Central Office.]

III. MONITORING REQUIREMENTS.**# 011 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) A device approved by the Department and maintained to provide accurate opacity measurements.
- (b) Observers trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

012 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall monitor the facility, once per operating day, for the following:

- (1) Odors which may be objectionable (as per 25 Pa. Code § 123.31).
- (2) Visible Emissions (as per 25 Pa. Code §§ 123.41 and 123.42).
- (3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) Be investigated;
- (2) Be reported to the facility management, or individual(s) designated by the permittee;
- (3) Have appropriate corrective action taken (for emissions that originate on-site); and
- (4) Be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

IV. RECORDKEEPING REQUIREMENTS.**# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

**SECTION C. Site Level Plan Approval Requirements**

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) Date, time, and location of the incident(s).
- (b) The cause of the event.
- (c) The corrective action taken, if necessary to abate the situation and prevent future occurrences.

014 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) De minimis increases without notification to the Department.
- (b) De minimis increases with notification to the Department, via letter.
- (c) Increases resulting from a Request for Determination (RFD) to the Department.
- (d) Increases resulting from the issuance of a plan approval and subsequent operating permit.

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain monthly and 12-month rolling sums of facility-wide HAP emissions.

V. REPORTING REQUIREMENTS.**# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) name, permit or authorization number, and location of the facility,
- (2) nature and cause of the malfunction, emergency or incident,
- (3) date and time when the malfunction, emergency or incident was first observed,
- (4) expected duration of excess emissions,
- (5) estimated rate of emissions,
- (6) corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

**SECTION C. Site Level Plan Approval Requirements**

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

017 [25 Pa. Code §135.3]**Reporting**

(a) If the facility is a Synthetic Minor Facility, the permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator of a Synthetic Minor Facility may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 018 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(a) Use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;

(b) Application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;

(c) Paving and maintenance of roadways; and

(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

019 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall immediately, upon discovery, implement measures which may include the application for the installation of air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of any source is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

020 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall ensure that all sources are operated and maintained in accordance with manufacturer's specifications and good engineering and air pollution control practices.

021 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The sources listed in this plan approval shall be installed and operated in accordance with the plans submitted with the plan approval application (as approved herein).

VII. ADDITIONAL REQUIREMENTS.**# 022 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

This minor modification supersedes the previously issued minor modification plan approval in its entirety.

VIII. COMPLIANCE CERTIFICATION.



SECTION C. Site Level Plan Approval Requirements

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

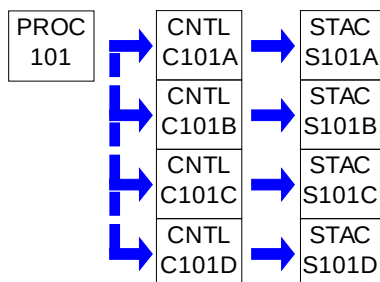
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 101

Source Name: RAW MATERIAL HANDLING

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.12(a)(5).]

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of filterable particulate matter in the effluent gas exceeds 0.02 grain per dry standard cubic foot, according to 25 Pa. Code § 127.12(a)(5).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall continuously monitor the pressure differential of the associated bin vents (C101A, C101B, C101C, and C101D) using a photohelic or magnehelic gauge at all times material is stored or being transferred to the silo.

IV. RECORDKEEPING REQUIREMENTS.**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall keep records of the following for the source and the particulate matter control devices (C101A, C101B, C101C, C101D) associated with this source:

- (a) inspections performed,
- (b) maintenance performed (including when filters are replaced),
- (c) any deficiencies, and
- (d) any corrective actions taken.

004 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall record the pressure differential across the particulate matter control devices (C101A, C101B, C101C, C101D) associated with this source during each delivery or transfer of material into each silo.

**SECTION D. Source Level Plan Approval Requirements****V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall operate and maintain this source and the associated particulate matter control devices according to the manufacturer's specifications and/or the facility's O&M Plan and good air pollution control practices.

(b) The permittee shall maintain on site copies of manufacturer specifications and/or the facility's O&M Plan for this source and each particulate matter control device associated with this source.

006 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall implement an inspection and maintenance plan for each particulate matter control device associated with this source, including, but not limited to the following:

- (a) The permittee shall keep spare filters on hand for replacement.
- (b) The permittee shall replace filters as needed.
- (c) The permittee shall inspect the air pollution control device for proper operation.
- (d) The permittee shall generally observe that the equipment is maintained in good operating condition.

007 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall operate this source only when the associated particulate matter control devices are operating properly.

008 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain a pressure drop range of 0.5 to 6.0 inches water gauge for each bin vent associated with this source.

Note: The Department reserves the right to modify the operating parameters shown above, depending on monitoring or operating data collected.

VII. ADDITIONAL REQUIREMENTS.**# 009 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Source ID 101 contains storage silos and bins, including the following:

- (a) Lime Silo
- (b) Aluminum Grit Silos (2)
- (c) Chromite Silo.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 102

Source Name: ALUMINUM PRODUCTION

Source Capacity/Throughput:

N/A

N/A

Natural Gas

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.12(a)(5).]

No person may permit the emission into the outdoor atmosphere of particulate matter from a process at any time, in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot, according to 25 Pa. Code § 123.13(b).

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.12(a)(5).]

The permittee shall limit the VOC emission concentration at the outlet of the aluminum production melt furnace exhaust to 20 ppmv.

[Initial compliance with the VOC emission outlet concentration will be determined with the initial stack test required for this source.]

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1505]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Emission standards for affected sources and emission units.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1505(i)(3) and (k)(3), and Table 1 of Part 63 Subpart RRR.]

(a) The permittee shall limit dioxin and furan (D/F) emissions from the secondary aluminum processing unit (melt furnace) to 15 µg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge from the melt furnace.

(b) The permittee shall comply with the emission limit calculated using the equation for D/F specified in 40 CFR § 60.1505(k)(3) for the melt furnace based on a 3-day, 24-hour rolling average.

[Initial compliance with this permit condition will be determined during the initial source test.]

Fuel Restriction(s).**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall use natural gas only in the burners of the melting furnace associated with Source ID 102 - Aluminum Production.

(b) The melt furnace shall be equipped with low-NOx burners.

**SECTION D. Source Level Plan Approval Requirements****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall perform an initial stack test to determine the VOC concentration as methane at the exhaust outlet of the aluminum production melt furnace using the Department-approved procedures. The test shall be conducted in accordance with the provisions of EPA Test Method 25A and other Department approved methodology and 25 Pa. Code Chapter 139, including the procedures of the most recent DEP Source Testing Manual. The test shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(b) During testing, the permittee shall monitor and record temperature of the melt furnace airspace or oxygen flame or other location as proposed and approved prior to the test.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(d) Within sixty (60) days after the source test(s), one paper copy plus one electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

(f) The Department reserves the right to require periodic testing of the melt furnace exhaust for VOC emission outlet concentrations. The subsequent testing requirement may be revised based on the results of the initial source test required herein. Further testing will be evaluated prior to incorporation of this plan approval into the facility-wide operating permit.

(g) The Department reserves the right to require periodic monitoring and recording of the melt furnace operating temperature at a location to be determined, based on but not limited to review of the initial test results.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1511]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration general requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1511(a).]

Prior to conducting any performance test required 40 CFR Part 63 Subpart RRR, the permittee shall prepare a site-specific test plan which satisfies all of the rule requirements, and must obtain approval of the plan pursuant to the procedures set forth in 40 CFR § 63.7. Performance tests shall be conducted under such conditions as the Administrator specifies to the permittee based on representative performance of the affected source for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1511]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration general requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1511(b).]

(a) Following approval of the site-specific test plan, the permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in 40 CFR § 63.1515(b). The permittee shall conduct the initial performance test within 180 days after startup of the melt furnace. Except for the date by which the performance test must be conducted, the owner or operator must conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR § 63.7(c). Owners or operators of affected sources located at facilities which are area

**SECTION D. Source Level Plan Approval Requirements**

sources are subject only to those performance testing requirements pertaining to D/F.

(b) The performance tests must be conducted under representative conditions expected to produce the highest level of HAP emissions expressed in the units of the emission standards for the HAP (considering the extent of feed/charge contamination, reactive flux addition rate and feed/charge rate). If a single test condition is not expected to produce the highest level of emissions for all HAP, testing under two or more sets of conditions (for example high contamination at low feed/charge rate, and low contamination at high feed/charge rate) may be required. Any subsequent performance tests for the purposes of establishing new or revised parametric limits shall be allowed upon pre-approval from the Administrator. These new parametric settings shall be used to demonstrate compliance for the period being tested.

(c) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle. Additionally, for batch processes where the length of the process operating cycle is not known in advance, and where isokinetic sampling must be conducted based on the procedures in Method 5 in appendix A to 40 CFR Part 60, use the following procedure to ensure that sampling is conducted over the entire process operating cycle:

(1) Choose a minimum operating cycle length and begin sampling assuming this minimum length will be the run time (e.g., if the process operating cycle is known to last from four to six hours, then assume a sampling time of four hours and divide the sampling time evenly between the required number of traverse points);

(2) After each traverse point has been sampled once, begin sampling each point again for the same time per point, in the reverse order, until the operating cycle is complete. All traverse points as required by Method 1 of appendix A to part 60, must be sampled at least once during each test run;

(3) In order to distribute the sampling time most evenly over all the traverse points, do not perform all runs using the same sampling point order (e.g., if there are four ports and sampling for run 1 began in port 1, then sampling for run 2 could begin in port 4 and continue in reverse order.)

(d) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(e) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(f) Apply paragraphs (b) through (e) of this condition for each pollutant separately if a different production rate, charge material or, if applicable, reactive fluxing rate would apply and thereby result in a higher expected emissions rate for that pollutant.

(g) The permittee may not conduct performance tests during periods of malfunction.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1511]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration general requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1511(c) and (d).]

(a) The permittee shall use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards, as applicable:

(1) Method 1 for sample and velocity traverses.

(2) Method 2 for velocity and volumetric flow rate.

(3) Method 3 for gas analysis.

(4) Method 4 for moisture content of the stack gas.

**SECTION D. Source Level Plan Approval Requirements**

(5) Method 23 for the concentration of D/F.

(b) The permittee may use alternative test methods as provided as follows:

(1) In lieu of conducting the annual flow rate measurements using Methods 1 and 2, the permittee may use Method 204 in Appendix M to 40 CFR Part 51 to conduct annual verification of a permanent total enclosure for the affected source/emission unit.

(2) The permittee may use an alternative test method approved by the Administrator.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1511]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration general requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1511(g).]

The permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate testing procedures in the permit and submit the information in the notification of compliance status report.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1511]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration general requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1511(f).]

With the prior approval of the Administrator, the permittee may utilize emission rates obtained by testing a particular type of group 1 furnace that does not have an add-on air pollution control device, or by testing an in-line flux box that does not have an add-on air pollution control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied:

(a) The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;

(b) The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;

(c) The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;

(d) The tested emission unit must be of the same design as the emission units that it represents; and

(e) The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

(f) All 3 separate runs of a performance test must be conducted on the same emission unit.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(d).]

(a) The permittee shall conduct performance tests to measure emissions of D/F at the outlet of the control device.

(b) The permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted.

**SECTION D. Source Level Plan Approval Requirements****# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]****Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(j).]

The permittee shall conduct performance tests as described in this condition. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR § 63.1510(t). A performance test is required for the melt furnace that processes scrap other than clean charge to measure emissions of D/F.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(k).]

During the emission test conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the permittee shall measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. A permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(n).]

The permittee shall use the following procedures to establish an operating parameter value or range for the inlet gas temperature:

- (a) Continuously measure and record the temperature at the inlet to the lime-injected fabric filter every 15 minutes during the D/F performance tests;
- (b) Determine and record the 15-minute block average temperatures for the 3 test runs; and
- (c) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(o).]

The permittee shall use the following procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate:

- (a) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;
- (b) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
- (c) Determine the total reactive chlorine flux injection rate and, for uncontrolled furnaces, the total reactive fluorine flux injection rate by adding the recorded measurement of the total weight of chlorine and, for uncontrolled furnaces, fluorine in the gaseous or liquid reactive flux injected and the total weight of chlorine and, for uncontrolled furnaces, fluorine in the solid reactive flux using Equation 5 of 40 CFR § 63.1512(o)(3).

**SECTION D. Source Level Plan Approval Requirements**

(d) Divide the weight of total chlorine or fluorine usage (Wt) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

(e) If a solid reactive flux other than magnesium chloride or potassium fluoride is used, the permittee shall derive the appropriate proportion factor subject to approval by the Administrator.

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1512]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Performance test/compliance demonstration requirements and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1512(p).]

The permittee shall use the following procedures during the D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test:

(a) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and

(b) Record the feeder setting and lime injection rate for the 3 test runs. If the feed rate setting and lime injection rates vary between the runs, determine and record the average feed rate and lime injection rate from the 3 runs.

III. MONITORING REQUIREMENTS.**# 017 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall continuously monitor the pressure differential across the aluminum production baghouse (C102) using a photohelic or magnehelic gauge, when the source is in operation.

018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(b).]

The permittee shall prepare and implement a written operation, maintenance, and monitoring (OM&M) plan. The permittee shall submit the OM&M plan to the Administrator within 90 days after a successful initial performance test. The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of 40 CFR § 63.1510(b) and is otherwise consistent with the requirements of 40 CFR Part 63 Subpart RRR. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the Administrator, unless and until the plan is revised in accordance with the following procedures. If the Administrator determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR Part 63 Subpart RRR, the permittee shall promptly make all necessary revisions and resubmit the revised plan. 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 incorporating them to the Administrator. Each plan must contain the following information:

(a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

(b) A monitoring schedule for each affected source and emission unit.

(c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards.

(d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

(1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

**SECTION D. Source Level Plan Approval Requirements**

(2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of Part 63.

(e) Procedures for monitoring process and control device parameters, including lime injection rates, procedures to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

(f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

(1) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and

(2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

(g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(h) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits.

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(c).]

The permittee shall inspect the labels for the melt furnace and the in-line fluxer at least once per calendar month to confirm that posted labels as required by the operational standard are intact and legible.

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(d).]

The permittee shall:

(a) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and

(b) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements and record the results of each inspection. This inspection shall include a volumetric flow rate measurement taken at a location in the ductwork downstream of the hoods that is representative of the actual volumetric flow rate without interference due to leaks, ambient air added for cooling or ducts from other hoods. The flow rate measurement must be performed in accordance with paragraphs (b)(2)(i), (ii), or (iii) of this condition. As an alternative to the flow rate measurement specified in this paragraph, the inspection may satisfy the requirements of this paragraph, including the operating requirements in 40 CFR § 63.1506(c), by including permanent total enclosure verification in accordance with paragraph (b)(1) or (4) of this condition. Inspections that fail to successfully demonstrate that the requirements of 40 CFR § 63.1506(c) are met, must be followed by repair or adjustment to the system operating conditions and a follow up inspection within 45 days to demonstrate that 40 CFR § 63.1506(c) requirements are fully met.

(1) Conduct annual flow rate measurements using EPA Methods 1 and 2 in appendix A to 40 CFR part 60, or conduct annual verification of a permanent total enclosure using EPA Method 204; or the permittee may follow one of the three alternate procedures described in paragraphs (2), (3), or (4) of this condition to maintain system operations in accordance with an operating limit established during the performance test. The operating limit is determined as the average reading of a parametric monitoring instrument (Magnehelic®, manometer, anemometer, or other parametric monitoring instrument)

**SECTION D. Source Level Plan Approval Requirements**

and technique as described in paragraphs (b)(2), (3), and (4) of this condition. A deviation, as defined in paragraphs (2), (3), and (4) of this condition, from the parametric monitoring operating limit requires the permittee to make repairs or adjustments to restore normal operation within 45 days.

(2) As an alternative to annual flow rate measurements using EPA Methods 1 and 2, measurement with EPA Methods 1 and 2 can be performed once every 5 years, provided that:

- (i) A flow rate indicator consisting of a pitot tube and differential pressure gauge (Magnehelic®, manometer or other differential pressure gauge) is installed with the pitot tube tip located at a representative point of the duct proximate to the location of the Methods 1 and 2 measurement site; and
- (ii) The flow rate indicator is installed and operated in accordance with the manufacturer's specifications; and
- (iii) The differential pressure is recorded during the Method 2 performance test series; and
- (iv) Daily differential pressure readings are made by taking three measurements with at least 5 minutes between each measurement and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average pressure differential indicated by the flow rate indicator during the most recent Method 2 performance test series; and
- (v) An inspection of the pitot tube and associated lines for damage, plugging, leakage and operational integrity is conducted at least once per year; or

(3) As an alternative to annual flow rate measurements using EPA Methods 1 and 2, measurement with EPA Methods 1 and 2 can be performed once every 5 years, provided that:

- (i) Daily measurements of the capture and collection system's fan revolutions per minute (RPM) or fan motor amperage (amps) are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average RPM or amps measured during the most recent Method 2 performance test series; or
- (ii) A static pressure measurement device is installed in the duct immediately downstream of the hood exit, and daily pressure readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or better of the average vacuum recorded during the most recent Method 2 performance test series; or
- (iii) A hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple and automated data logging software and associated hardware is installed; and daily readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series; or
- (iv) For booth-type hoods, hotwire anemometer measurements of hood face velocity are performed simultaneously with EPA Method 1 and 2 measurements, and the annual hood face velocity measurements confirm that the enclosure draft is maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series. Daily readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 1 and 2 performance test series.

(4) As an alternative to the annual verification of a permanent total enclosure using EPA Method 204, verification can be performed once every 5 years, provided that:

- (i) Negative pressure in the enclosure is directly monitored by a pressure indicator installed at a representative location;
- (ii) Pressure readings are recorded daily or the system is interlocked to halt material feed should the system not operate under negative pressure;

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(iii) An inspection of the pressure indicator for damage and operational integrity is conducted at least once per calendar year.

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(e).]

The permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the Administrator to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(a) The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured. The permittee may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of 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 affected source will meet the relevant emission standard.

(b) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(f)(1).]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system or a continuous opacity monitoring system. The following requirements apply to the permittee using a bag leak detection system:

(a) The permittee shall install and operate a bag leak detection system for each exhaust stack of a fabric filter.

(b) Each bag leak detection system must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions.

(c) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(d) The bag leak detection system sensor must provide output of relative or absolute PM loadings.

(e) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(f) 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. The alarm must be located where it is easily heard by plant operating personnel.

(g) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing

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the alarm set points and the alarm delay time.

(j) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or 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 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(h).]

(a) The permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in 40 CFR Part 63 Subpart A.

(b) The temperature monitoring device must meet each of these performance and equipment specifications:

(1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

(2) The recorder response range must include zero and 1.5 times the average temperature established.

(3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(i).]

(a) The permittee shall verify that lime of the continuous lime injection system is always free-flowing by either:

(1) Inspecting each feed hopper or silo at least once each 8-hour period and recording 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 frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or

(2) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the permittee shall promptly initiate and complete corrective action, or

(3) Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. 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.

(b) The permittee shall record the lime feeder setting once each day of operation.

(c) The permittee who intermittently adds lime to a lime-injected fabric filter must obtain approval from the Administrator for a lime addition monitoring procedure. The Administrator will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

(d) At least once per month, verify that the lime injection rate in pounds per hour (lb/hr) is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. If the monthly check of the lime injection rate is below the 90 percent, the owner or operator must repair or adjust the lime injection system to restore

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normal operation within 45 days. The permittee may request from the Administrator, an extension of up to an additional 45 days to demonstrate that the lime injection rate is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. In the event that a lime feeder is repaired or replaced, the feeder must be calibrated, and the feed rate must be restored to the lb/hr feed rate operating limit established during the most recent performance test within 45 days. The permittee may request from the Administrator, an extension of up to an additional 45 days to complete the repair or replacement and establishing a new setting. The repair or replacement, and the establishment of the new feeder setting(s) must be documented in accordance with the recordkeeping requirements of 40 CFR § 63.1517.

025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(j).]

The permittee shall:

(a) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.

(1) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

(2) The accuracy of the weight measurement device must be ± 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Administrator for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.

(3) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(b) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test.

(c) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

(1) Gaseous or liquid reactive flux other than chlorine; and

(2) Solid reactive flux.

(d) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test. For solid flux that is added intermittently, record the amount added for each operating cycle or time period used in the performance test.

(e) The permittee performing reactive fluxing may apply to the Administrator 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 time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(s).]

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The permittee shall include the following information within the OM&M:

- (a) The identification of each emission unit in the secondary aluminum processing unit;
- (b) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
- (c) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
- (d) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
- (e) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).
- (f) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:
 - (1) Any averaging among emissions of differing pollutants;
 - (2) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
 - (3) The inclusion of any emission unit while it is shutdown; or
 - (4) The inclusion of any periods of startup or shutdown in emission calculations.
- (g) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee shall submit a request to the Administrator containing the information required by this condition and obtain approval of the Administrator prior to implementing any revisions.

027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(t) and (u).]

(a) Except as provided in paragraph (b) of this condition, the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the permittee shall:

(1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information. If the permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

(2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.

(i) Where no performance test has been conducted, for a particular emission unit, because the permittee has, with the approval of the Administrator, chosen to determine the emission rate of an emission unit by testing a representative unit, the permittee shall use the emission rate determined from the representative unit in the SAPU emission rate calculation.

(3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(4) Compute the 24-hour daily emission rate using Equation 4 of 40 CFR § 63.1510(t)(4).

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(5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3. The SAPU is in compliance with an applicable emission limit if the 3-day, 24-hour rolling average for each pollutant is no greater than the applicable SAPU emission limit determined in accordance with 40 CFR § 63.1505(k)(1)-(3).

(b) As an alternative to the procedures of paragraph (a) of this condition, the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(v).]

The owner or operator of a lime-coated fabric filter that employs intermittent or noncontinuous lime addition may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1510]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1510(w).]

If the permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR Part 63 Subpart RRR, the permittee may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in paragraphs (a) through (f) of this condition:

(a) The Administrator will not approve averaging periods other than those specified in this condition.

(b) The permittee shall continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(c) The permittee shall submit the application for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (a)(1) through (3) of this condition:

(1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(2) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and

(3) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).

(d) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:

(1) Notice of the information and findings upon which the intended disapproval is based; and

(2) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide

**SECTION D. Source Level Plan Approval Requirements**

additional supporting information.

(e) The permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of 40 CFR Part 63 Subpart RRR.

(f) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of 40 CFR Part 63 Subpart RRR.

IV. RECORDKEEPING REQUIREMENTS.**# 030 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall keep records of the following for the melt furnace and the particulate matter control device (C102) associated with this source:

- (a) inspections performed,
- (b) maintenance performed (including when filters are replaced),
- (c) any deficiencies, and
- (d) any corrective actions taken.

031 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain daily records of the pressure differential across the particulate matter control device (C102) associated with this source, when in operation.

032 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1517]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Records**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1517(a).]

- (a) The permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR Part 63 Subpart RRR.
- (b) The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche.
- (d) The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

033 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1517]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Records**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1517(b).]

The permittee shall maintain records of the following:

- (a) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter using a bag leak detection system, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

**SECTION D. Source Level Plan Approval Requirements**

(b) For each Group 1 Furnace subject to D/F emission standard with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+ 25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

(c) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

(1) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;

(2) If lime feeder setting is monitored, records of daily and monthly inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. If a lime feeder has been repaired or replaced, this action must be documented along with records of the new feeder calibration and the feed mechanism set points necessary to maintain the lb/hr feed rate operating limit. These records must be maintained on site and available upon request.

(3) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR § 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).

(d) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

(e) For each continuous monitoring system, records required by 40 CFR § 63.10(c).

(f) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

(g) For each in-line fluxer for which the owner or operator has certified that no reactive flux was used:

(1) Operating logs which establish that no source of reactive flux was present at the in-line fluxer;

(2) Labels required pursuant to 40 CFR § 63.1506(b) which establish that no reactive flux may be used at the in-line fluxer; or

(3) Operating logs which document each flux gas, agent, or material used during each operating cycle.

(h) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

(i) Records of annual inspections of emission capture/collection and closed vent systems or, if the alternative to the annual flow rate measurements is used, records of differential pressure; fan RPM or fan motor amperage; static pressure measurements; or duct centerline velocity using a hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple, as appropriate.

(j) Records for any approved alternative monitoring or test procedure.

(k) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

**SECTION D. Source Level Plan Approval Requirements**

- (1) OM&M plan; and
- (2) Site-specific secondary aluminum processing unit emission plan (if applicable).

(l) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

(m) For any failure to meet an applicable standard, the owner or operator must maintain the following records;

(1) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR § 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(n) For each period of startup or shutdown for which the owner or operator chooses to demonstrate compliance for an affected source, the owner or operator must comply with (b)(19)(i) or (ii) of this section.

(1) To demonstrate compliance based on a feed/charge rate of zero, a flux rate of zero and the use of electricity, propane or natural gas as the sole sources of heating or the lack of heating, the owner or operator must submit a semiannual report in accordance with §63.1516(b)(2)(vii) or maintain the following records:

- (i) The date and time of each startup and shutdown;
- (ii) The quantities of feed/charge and flux introduced during each startup and shutdown; and
- (iii) The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or

(2) To demonstrate compliance based on performance tests, the owner or operator must maintain the following records:

- (i) The date and time of each startup and shutdown;
- (ii) The measured emissions in lb/hr or µg/hr or ng/hr;
- (iii) The measured feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and
- (iv) An explanation to support that such conditions are considered representative startup and shutdown operations.

(o) For owners or operators that choose to change furnace operating modes, the following records must be maintained:

- (1) The date and time of each change in furnace operating mode, and
- (2) The nature of the change in operating mode (for example, group 1 controlled furnace processing other than clean charge to group 2).

V. REPORTING REQUIREMENTS.

034 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1515]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Notifications.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1515(a).]

The permittee shall submit initial notifications to the Administrator as follows:

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(a) As required by 40 CFR § 63.9(b)(3), the permittee shall provide notification that the source is subject to the standard. [Submittal of the plan approval application to the DEP and EPA satisfies this requirement for this project.]

(b) As required by 40 CFR § 63.9(b)(5), the permittee shall provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR § 63.5(d). The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart.

(c) As required by 40 CFR § 63.9(d), the permittee shall provide notification of any special compliance obligations for a new source.

(d) As required by 40 CFR § 63.9(e) and (f), the permittee shall provide notification of the anticipated date for conducting performance tests and visible emission observations. The permittee shall notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

035 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1515]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Notifications.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1515(b).]

The permittee shall submit a notification of compliance status report within 60 days after the startup date. The permittee shall submit a notification of compliance status report within 90 days after conducting the initial performance test. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in 40 CFR § 63.1515(a) paragraphs (1) through (10). 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. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

(a) All information required in 40 CFR § 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

(b) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

(c) Unit labeling as described in 40 CFR § 63.1506(b), including process type or furnace classification and operating requirements.

(d) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(e) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR § 63.1506(c).

(f) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR § 63.1510(f).

(g) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).

**SECTION D. Source Level Plan Approval Requirements****# 036 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1516]****Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Reports.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1516(b).]

The permittee shall submit semiannual reports according to the requirements in 40 CFR § 63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR § 63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

(a) A report must be submitted if any of these conditions occur during a 6-month reporting period:

(1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

(2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

(3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR Part 63 Subpart RRR.

(4) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

(b) Each report must include each of these certifications, as applicable:

(1) For each in-line fluxer using no reactive flux: "Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period."

(2) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR § 63.1513(f)(1): "During each startup and shutdown, no flux and no feed/charge were added to the emission unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated."

(c) The permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(1) Within 60 days after the date of completing each performance test, the permittee shall submit the results of the performance tests, including any associated fuel analyses, following the either procedure as follows:

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html), the permittee shall submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).) Performance test data must be submitted 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 Web site. If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the permittee shall submit the results of the performance test to the Administrator at the appropriate address listed in 40

**SECTION D. Source Level Plan Approval Requirements**

CFR § 63.13.

(d) A malfunction report shall be submitted simultaneously with the semiannual excess emissions/summary report.

037 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1516]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Reports.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1516(d).]

If there was a malfunction during the reporting period, the permittee shall submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and 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. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR § 63.1506(a)(5).

038 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1516]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Reports.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1516(e).]

All reports required by 40 CFR Part 63 Subpart RRR not subject to the excess emissions and summary reporting requirements must be sent to the Administrator at the appropriate address listed in 40 CFR § 63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to the excess emissions and summary reporting requirements of this section in paper format.

VI. WORK PRACTICE REQUIREMENTS.

039 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall operate and maintain this source and the associated particulate matter control device according to the manufacturer's specifications and/or the facility's O&M Plan and good air pollution control practices.

(b) The permittee shall maintain on site copies of manufacturer specifications and/or the facility's O&M Plan for this source and the particulate matter control device associated with this source.

040 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall implement an inspection and maintenance plan for the particulate matter control device associated with this source, including, but not limited to the following:

(a) The permittee shall keep spare filters on hand for replacement.

(b) The permittee shall replace filters as needed.

(c) The permittee shall inspect the air pollution control device for proper operation.

(d) The permittee shall generally observe that the equipment is maintained in good operating condition.

041 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall operate this source only when the associated particulate matter control device is operating properly.

042 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain a pressure drop range of 0.5 to 6.0 inches water gauge for the baghouse associated with this

**SECTION D. Source Level Plan Approval Requirements**

source.

Note: The Department reserves the right to modify the operating parameters shown above, depending on the source stack test results or other operating or monitoring data.

043 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(a)(5).]

At all times, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

044 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(c)(1) - (3).]

The permittee shall:

(a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates or facial inlet velocities as contained in the ACGIH Guidelines (incorporated by reference, see 40 CFR § 63.14);

(b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

(c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

045 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(d)(1) and (2).]

The permittee shall :

(a) Install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

(b) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

046 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]**Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(m).]

The permittee shall:

(a) Initiate corrective action within 1 hour of a bag leak detection system alarm.

(b) Complete the corrective action procedures in accordance with the OM&M plan.

(c) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of



SECTION D. Source Level Plan Approval Requirements

the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the permittee takes longer than 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.

(d) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(e) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at or above the level established during the performance test.

(f) 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 during the performance test.

(g) The operation of capture/collection systems and control devices associated with natural gas-fired, propane-fired or electrically heated group 1 furnaces that will be idled for at least 24 hours after the furnace cycle has been completed may be temporarily stopped. Operation of these capture/collection systems and control devices must be restarted before feed/charge, flux or alloying materials are added to the furnace.

047 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(p).]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee shall initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or 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 or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

048 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1506]

Subpart RRR -- National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Operating requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35 and 40 CFR § 63.1506(b)(1) and (2).]

The permittee shall provide and maintain easily visible labels posted at the melt furnace and in-line fluxer that identifies the applicable emission limits and means of compliance, including:

(a) The type of affected source or emission unit (e.g., group 1 furnace and in-line fluxer).

(b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

VII. ADDITIONAL REQUIREMENTS.

049 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The melt furnace is considered a Group 1 Furnace, as the term is defined in 40 CFR § 63.1503:

Group 1 furnace means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing.

Secondary aluminum processing unit (SAPU): An existing SAPU means all existing group 1 furnaces and all existing in-line

**SECTION D. Source Level Plan Approval Requirements**

fluxers within a secondary aluminum production facility. Each existing group 1 furnace or existing in-line fluxer is considered an emission unit within a secondary aluminum processing unit. A new SAPU means any combination of individual group 1 furnaces and in-line fluxers within a secondary aluminum processing facility which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to 40 CFR § 63.1505(k)(6). Each of the group 1 furnaces or in-line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit. A secondary aluminum production facility may have more than one new SAPU.

050 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Aluminum Production includes the following process equipment:

- (1) Melt Furnace

(b) The following Aluminum Production processes do not vent to the outdoor atmosphere:

- (1) Granulating
- (2) Dross Handling
- (3) Aluminum Grit Bins.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 103

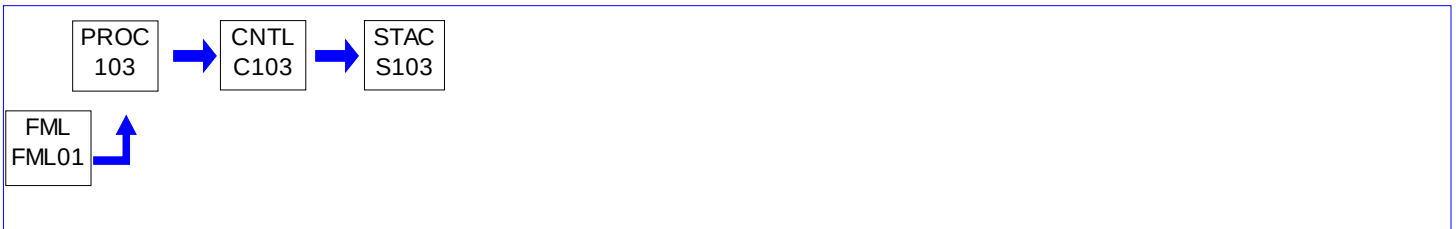
Source Name: CHROMITE ORE DRYER

Source Capacity/Throughput:

N/A

Natural Gas

N/A

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.12(a)(5).]

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of filterable particulate matter in the effluent gas exceeds 0.02 grain per dry standard cubic foot, according to 25 Pa. Code § 127.12(a)(5).

Fuel Restriction(s).

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall use natural gas only in the Chromite Ore Dryer burners.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall continuously monitor the pressure differential of the associated baghouse (C103) using a photohelic or magnehelic gauge, when the source is in operation.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep records of the following for the source and the particulate matter control device (C103) associated with this source:

- (a) inspections performed,
- (b) maintenance performed (including when filters are replaced),
- (c) any deficiencies, and
- (d) any corrective actions taken.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain daily records of the pressure differential across the particulate matter control device (C103) associated with this source, when in operation.

**SECTION D. Source Level Plan Approval Requirements****V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall operate and maintain this source and the associated particulate matter control device according to the manufacturer's specifications and/or the facility's O&M Plan and good air pollution control practices.

(b) The permittee shall maintain on site copies of manufacturer specifications and/or the facility's O&M Plan for this source and the particulate matter control device associated with this source.

007 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall implement an inspection and maintenance plan for the particulate matter control device associated with this source, including, but not limited to the following:

(a) The permittee shall keep spare filters on hand for replacement.

(b) The permittee shall replace filters as needed.

(c) The permittee shall inspect the air pollution control device for proper operation.

(d) The permittee shall generally observe that the equipment is maintained in good operating condition.

008 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall operate this source only when the associated particulate matter control devices are operating properly.

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain a pressure drop range of 0.5 to 6.0 inches water gauge across the baghouse associated with this source.

Note: The Department reserves the right to modify the operating parameters shown above, depending on monitoring or operating data collected.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

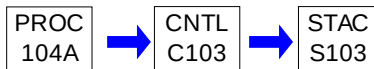
Source ID: 104A

Source Name: LOW CARBON FERROCHROME PRODUCTION

Source Capacity/Throughput:

N/A

Natural Gas

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.12(a)(5).]

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of filterable particulate matter in the effluent gas exceeds 0.02 grain per dry standard cubic foot, according to 25 Pa. Code § 127.12(a)(5).

[Compliance with the particulate matter BAT standard streamlines compliance with the mass emission rate calculated using the formula of 25 Pa. Code § 123.13(b)(2), applied to the plasma furnace.]

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall use natural gas only in the burners of the lime spray and dryer burners and caster associated with Source ID 104A - Low Carbon Ferrochrome Production.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11526]**Subpart YYYYYY - National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities****What are the standards for new and existing ferroalloys production facilities?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35.]

(a) The permittee shall not discharge to the atmosphere visible emissions (VE) from the control device that exceed 5 percent of accumulated occurrences in a 60-minute observation period.

(b) The permittee shall not discharge to the atmosphere fugitive PM emissions from the furnace building containing the electrometallurgical operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 60 percent.

[Initial compliance with this permit condition will be determined during the initial Test Method 9 and initial Test Method 22.]

[The requirements of 25 Pa. Code § 123.1 are more stringent than subcondition (b); therefore, (b) is streamlined with 25 Pa. Code § 123.1.]

II. TESTING REQUIREMENTS.**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR Part 63 Subpart YYYYYY.]

(a) At least ninety (90) days prior to the opacity and/or visible emissions test, the permittee shall submit to the Department for approval the procedures for the test and a sketch indicating the location of sampling or observation and other data as necessary.

(b) The test shall be conducted in accordance with the provisions referenced in 40 CFR Part 63 Subpart YYYYYY and in this



SECTION D. Source Level Plan Approval Requirements

permit or other Department approved methodology and 25 Pa. Code Chapter 139, including the procedures of the most recent DEP Source Testing Manual.

(c) At least sixty (60) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(d) Within sixty (60) days after the test, one paper copy plus one electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11528]

Subpart YYYYYY - National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities

What are the performance test and compliance requirements for new and existing sources?

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35.]

(a) The permittee shall conduct an initial Method 22 test within 15 days of startup of the control device.

(1) The permittee shall conduct a Method 22 (Appendix A-7 of 40 CFR Part 60) test to determine that VE from the control device do not exceed the emission standard specified in 40 CFR § 63.11526(a). For a fabric filter, conduct the test for at least 60 minutes at the fabric filter monovalent or outlet stack(s), as applicable.

(2) The permittee shall conduct a semiannual Method 22 test using the procedures specified in paragraph (a)(1) of this condition.

(b) The permittee shall conduct an initial Method 9 opacity test for fugitive emissions from the furnace building according to the procedures in 40 CFR § 63.6(h) and Method 9 (Appendix A-4 of 40 CFR Part 60). The test must be conducted for at least 60 minutes and shall include tapping the furnace or reaction vessel. The observation must be focused on the part of the building where electrometallurgical operation fugitive emissions are most likely to be observed.

(1) The permittee shall conduct subsequent Method 9 tests no less frequently than every 6 months and each time a process change is made to likely to increase fugitive emissions.

(2) After the initial Method 9 performance test, as an alternative to the Method 9 performance test, the permittee may monitor VE using Method 22 (Appendix A-7 of 40 CFR Part 60) for subsequent semi-annual compliance demonstrations. The Method 22 test is successful if no VE are observed for 90 percent of the readings over the furnace cycle (tap to tap) or 60 minutes, whichever is longer. If VE are observed greater than 10 percent of the time over the furnace cycle or 60 minutes, whichever is longer, then the permittee must conduct another test as soon as possible, but no later than 15 calendar days after the Method 22 test using Method 9 (Appendix A-4 of 40 CFR Part 60) as specified in paragraph (b) of this condition.

III. MONITORING REQUIREMENTS.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall continuously monitor the pressure differential of the associated baghouse (C103) using a photohelic or magnehelic gauge, when this source is in operation.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep records of the following for the source and the particulate matter control device (C103) associated with this source:

**SECTION D. Source Level Plan Approval Requirements**

- (a) inspections performed,
- (b) maintenance performed (including when filters are replaced),
- (c) any deficiencies, and
- (d) any corrective actions taken.

008 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain daily records of the pressure differential across the particulate matter control device (C103) associated with this source, when in operation.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11529]**Subpart YYYYYY - National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities****What are the notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall keep a copy of each notification that are submitted to comply with this subpart and all documentation supporting any Initial Notification (plan approval application), Notification of Compliance Status, and annual compliance certifications that are submitted.
- (b) Records must be in a form suitable and readily available for expeditious review.
- (c) The permittee shall maintain each record for 5 years following the date of each recorded action.
- (d) The permittee shall keep each record onsite for at least 2 years after the date of each recorded action; records may be kept offsite for the remaining 3 years.

V. REPORTING REQUIREMENTS.**# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11529]****Subpart YYYYYY - National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities****What are the notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall submit a Notification of Compliance Status in accordance with 40 CFR § 63.9(h) of the General Provisions before the close of business on the 30th day following the completion of the initial compliance demonstration. This notification must include the following:
 - (1) The results of Method 22 (Appendix A-7 of 40 CFR Part 60) test for VE as required by 40 CFR § 63.11528(a);
 - (2) The results of the Method 9 (Appendix A-4 of 40 CFR Part 60) test for building opacity as required by 40 CFR § 63.11528(a).
- (b) The permittee shall submit an annual certification of compliance to include the results of the Method 22 (Appendix A-7 of 40 CFR Part 60) or Method 9 (Appendix A-4 of 40 CFR Part 60) tests.

VI. WORK PRACTICE REQUIREMENTS.**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The permittee shall operate and maintain this source and the associated particulate matter control device according to the manufacturer's specifications and/or the facility's O&M Plan and good air pollution control practices.
- (b) The permittee shall maintain on site copies of manufacturer specifications and/or the facility's O&M Plan for this source and the particulate matter control device associated with this source.

**SECTION D. Source Level Plan Approval Requirements****# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall operate this source only when the associated particulate matter control devices are operating properly.

013 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall implement an inspection and maintenance plan for the particulate matter control device associated with this source, including, but not limited to the following:

- (a) The permittee shall keep spare filters on hand for replacement.
- (b) The permittee shall replace filters as needed.
- (c) The permittee shall inspect the air pollution control device for proper operation.
- (d) The permittee shall generally observe that the equipment is maintained in good operating condition.

014 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall maintain a pressure drop range of 0.5 to 6.0 inches water gauge across the baghouse associated with this source.

Note: The Department reserves the right to modify the operating parameters shown above, depending on monitoring or operating data collected.

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall reduce particulate matter emissions from furnace tapping by routing exhaust to the Chromite Ore Dryer Baghouse (C103).

VII. ADDITIONAL REQUIREMENTS.**# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Low Carbon Ferrochrome Production includes the following process equipment:

- (1) Plasma Arc Furnace (closed loop system)
- (2) Metal and Slag Tapping (controlled by C103)

(b) The following process equipment are vented to bin vents which do not vent to the outdoor atmosphere:

- (1) Mix Feed Hopper
- (2) Blender

(c) Material Feed Injection System (closed loop system)

(d) The following process equipment vent indoor and do not exhaust to the outdoor atmosphere:

- (1) Casting Machine
- (2) Caster Burner
- (3) Lime Spray and Dryer Burners
- (4) Jaw Crusher and Screen
- (5) Various Bins
- (6) Various Loading
- (7) Various Conveying
- (8) Wet Slag Granulation.



SECTION E. Source Group Plan Approval Restrictions.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description						
101	RAW MATERIAL HANDLING						
<table><tr><th>Emission Limit</th><th>Pollutant</th></tr><tr><td>0.020 gr/DRY FT3</td><td>PM10</td></tr></table>		Emission Limit	Pollutant	0.020 gr/DRY FT3	PM10		
Emission Limit	Pollutant						
0.020 gr/DRY FT3	PM10						
102	ALUMINUM PRODUCTION						
<table><tr><th>Emission Limit</th><th>Pollutant</th></tr><tr><td>0.020 gr/DRY FT3</td><td>PM10</td></tr><tr><td>20.000 PPMV</td><td>VOC</td></tr></table>		Emission Limit	Pollutant	0.020 gr/DRY FT3	PM10	20.000 PPMV	VOC
Emission Limit	Pollutant						
0.020 gr/DRY FT3	PM10						
20.000 PPMV	VOC						
103	CHROMITE ORE DRYER						
<table><tr><th>Emission Limit</th><th>Pollutant</th></tr><tr><td>0.020 gr/DRY FT3</td><td>PM10</td></tr></table>		Emission Limit	Pollutant	0.020 gr/DRY FT3	PM10		
Emission Limit	Pollutant						
0.020 gr/DRY FT3	PM10						
104A	LOW CARBON FERROCHROME PRODUCTION						
<table><tr><th>Emission Limit</th><th>Pollutant</th></tr><tr><td>0.020 gr/DRY FT3</td><td>PM10</td></tr></table>		Emission Limit	Pollutant	0.020 gr/DRY FT3	PM10		
Emission Limit	Pollutant						
0.020 gr/DRY FT3	PM10						

Site Emission Restriction Summary

Emission Limit	Pollutant
24.900 Tons/Yr	any combination HAP, based on a 12-month rolling sum Hazardous Air Pollutants
9.900 Tons/Yr	any individual HAP, based on a 12-month rolling sum Hazardous Air Pollutants

**SECTION H. Miscellaneous.**

Initial Plan Approval
AUTH ID 1283636
Issued January 27, 2020

The facility will be located in the Keystone Industrial Port Complex, at 53 Middle Drive, Morrisville, PA 19067.

Prior to and during construction of the facility, the mailing address is:

100 Four Falls Corporate Center
Suite 407
West Conshohocken, PA 19428

Minor Modification of the Plan Approval
AUTH ID 1322802
Proposed August 2020

MM Metals is proposing changes to process equipment type, manufacturer, and approximate capacity because of availability. Some of the original proposed equipment was going to be purchased from manufacturers outside of the United States. Because of the COVID-19 pandemic, the suppliers are no longer willing to or able to come to the United States to facilitate the installation of the equipment; therefore, alternate suppliers had to be located. In addition to a slight increase in the operating hours for the facility, the most significant changes include:

1. (Source ID 102) A change in the type of aluminum melt furnace and burners from a rotating furnace to a reverberatory furnace with low NOx burners. The size of the furnace will be reduced as will the burner size. These changes will decrease emissions.
2. (Source ID 102) Deletion of the aluminum holding furnace, ingot casting, and chopper grit equipment. These changes will reduce emissions.
3. (Source ID 104) Related to the ferrochrome production, deletion of a nitrogen heater and a decision to vent two (2) of the baghouses into the building. These changes will decrease emissions.

There is no change to control technology and no change to Best Available Technology (BAT). There is no increase in emissions with the proposed modifications. This minor modification supersedes the original plan approval in its entirety.

Minor Modification of the Plan Approval
AUTH ID 1353064
Proposed May 2021

1. MM Metals is proposing changes to the control device configuration for Source ID 104 (LC FeCr Production). MM Metals will no longer use the Furnace Metal and Slag Tapping Baghouse (C104A) and instead, gases from the ferrochrome furnace exhaust and slag tapping operations will now be vented to the Chromite Ore Dryer Baghouse (C103). There is no change in emissions due to the physical modification to the exhaust configuration and there is no change in the Best Available Technology (BAT) analysis.
2. Source ID 105 is not included in the minor modification plan approval because the unit is no longer a part of the project. MM Metals did not pursue installation of a natural gas-fired emergency generator; instead a diesel-fuel emergency engine and generator will supply power during interruptions. The 1,000-kW Kohler EGEN is a Model Year 2004 Tier I Engine; the requirements of 40 CFR Part 63 Subpart ZZZZ apply to the diesel engine. Further information is documented in RFD No. 8792.

Minor Modification of the Plan Approval
AUTH ID 1443084
Proposed August 2023

The plasma arc furnace operating as part of Low Carbon Ferrochrome Production (Source ID 104) is being replaced with a new single electrode plasma arc furnace without burners; Source ID 104 is now identified as Source ID 104A. The damaged plasma

**SECTION H. Miscellaneous.**

arc furnace has been removed from the site.



***** End of Report *****
