Facility ID: 0679030152 Issuance type: Title V Proposed Permit

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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**Part II - Specific Facility Terms and Conditions**

a **State and Federally Enforceable Section**

1. None

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b **State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

F003 - dross handling;
F004 - pouring;
F005 - salt cake crushing;
F006 - roadways and parking areas;
T001 - ammonia tank;
G001 - gasoline dispensing facility; and
Z001 - five 2.5 MMBtu/hr heaters and five 0.75 MMBtu/hr burners.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 0679030152 Emissions Unit ID: F001 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Scrap Processing Line #1, including an aluminum scrap shredder, vented to a fabric filter. | OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92) | Particulate emissions (stack only) shall not exceed 0.35 lb/hr and 1.53 tpy.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| | 40 CFR 63.1505(b)(1) | [40 CFR 63.1505(b)(1)]<br>The permittee shall not discharge emissions in excess of 0.010 grain of PM per dry standard cubic foot.<br><br>See section A.I.2.a. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time. |
| | OAC rule 3745-17-11(B)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a) Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

2. [40 CFR 63.1506(e)]
The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system and must:

a. [40 CFR 63.1506(e)(1)(i)]
Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan; and

b. [40 CFR 63.1506(e)(1)(ii)]
Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

3. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(d)]
The owner or operator must:

a. Install, operate, and maintain a capture/collection system for each affected source and emissions 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 in section A.II.1 [40 CFR 63.1506 (c)] and record the results of each inspection.

4. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

5. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

6. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

7. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

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

d. Records of annual inspections of emission capture/collection and closed vent systems.

e. Records for any approved alternative monitoring or test procedure.

f. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
a. The owner or operator must submit initial notifications to the applicable permitting authority as follows:

i. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

ii. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.
[40 CFR 63.1515(b)]
b. Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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:

i. 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).

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

iii Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
iv. 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, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

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

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

vii. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

viii. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

x. Startup, shutdown, and malfunction plan, with revisions.

2. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

3. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

4. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.3.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the permittee must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

2. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the permittee must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The permittee must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

3. [40 CFR 63.1511(c)]
The permittee must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

4. [40 CFR 63.1511(d)]
The permittee may use an alternative test method, subject to approval by the Administrator.

5. [40 CFR 63.1511(e)]
The permittee of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

a. The owner or operator must conduct performance tests to measure particulate emissions at the outlet of the control system. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office as required by 40 CFR 63.1515 (a)(6). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emission test (s).

Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the

written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

6. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

7. [40 CFR 63.1513(b)]
The following equation shall be used to determine compliance with an emission limit for PM:

E = (C x Q x K1) / P

where:

E = emission rate of PM, lb/ton of feed;
C = concentration of PM, gr/dscf;
Q = volumetric flow rate of exhaust gases, dscf/hr;
K1 = conversion factor, 1 lb/7,000 gr; and
P = production rate, ton/hr.

8. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.35 lb/hr, 1.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirement specified in section A.V.5. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (0.35 lb/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

0.010 grain of PM per dry standard cubic foot

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirement specified in section A.V.5.

c. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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VI. **Miscellaneous Requirements**

1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: F002 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Scrap Processing Line #2, including an aluminum scrap shredder, vented to a fabric filter. | OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92) | Particulate emissions (stack only) shall not exceed 0.35 lb/hr and 1.53 tpy.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| | 40 CFR 63.1505(b)(1) | [40 CFR 63.1505(b)(1)]<br>The permittee shall not discharge emissions in excess of 0.010 grain of PM per dry standard cubic foot.<br><br>See section A.I.2.a. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time. |
| | OAC rule 3745-17-11(B)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a) Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

2. [40 CFR 63.1506(e)]
The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system and must:

a. [40 CFR 63.1506(e)(1)(i)]
Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan; and

b. [40 CFR 63.1506(e)(1)(ii)]
Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

3. [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 owner or

operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(d)]
The owner or operator must:

a. Install, operate, and maintain a capture/collection system for each affected source and emissions 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 in section A.II.1 [40 CFR 63.1506 (c)] and record the results of each inspection.

4. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

5. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

6. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

7. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

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

d. Records of annual inspections of emission capture/collection and closed vent systems.

e. Records for any approved alternative monitoring or test procedure.

f. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
a. The owner or operator must submit initial notifications to the applicable permitting authority as follows:

i. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

ii. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.
[40 CFR 63.1515(b)]
b. Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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:

i. 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).

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

iii Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
iv. 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, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

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

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

vii. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

viii. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

x. Startup, shutdown, and malfunction plan, with revisions.

2. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

3. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

4. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.3.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the permittee must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

2. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the permittee must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The permittee must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

3. [40 CFR 63.1511(c)]
The permittee must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

4. [40 CFR 63.1511(d)]
The permittee may use an alternative test method, subject to approval by the Administrator.

5. [40 CFR 63.1511(e)]
The permittee of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

a. The owner or operator must conduct performance tests to measure particulate emissions at the outlet of the control system. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office as required by 40 CFR 63.1515 (a)(6). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emission test (s).

Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

6. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

7. [40 CFR 63.1513(b)]
The following equation shall be used to determine compliance with an emission limit for PM:

$E = (C \times Q \times K1) / P$

where:

E = emission rate of PM, lb/ton of feed;
C = concentration of PM, gr/dscf;
Q = volumetric flow rate of exhaust gases, dscf/hr;
K1 = conversion factor, 1 lb/7,000 gr; and
P = production rate, ton/hr.

8. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.35 lb/hr, 1.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirement specified in section A.V.5. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (0.35 lb/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

0.010 grain of PM per dry standard cubic foot

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirement specified in section A.V.5.

c. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996. No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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VI. **Miscellaneous Requirements**

1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P901 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #1 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and |

| | |
|---|---|
| | HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary

aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P901 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P902 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #2 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with

the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at

the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction

standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P902 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P903 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #3 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight. |

| | |
|---|---|
| | See section A.I.2.a. |
| OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr. |
| | See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all

emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]

a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]

a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]

The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored

as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]

The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P903 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 0679030152 Emissions Unit ID: P904 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall

not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #4 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace,

group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission

standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once

each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all

performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including

procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for

each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton)

format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P904 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P905 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #5 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed |

| | |
|---|---|
| | 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum

production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.

b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.

d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]

The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]

Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of

compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P905 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P906 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #6 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

b. Multiply the total feed/charge weight to the emissions unit, or the weight of aluminum produced by the

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]

As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P906 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 0679030152 Emissions Unit ID: P907 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #7 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the |

| | |
|---|---|
| | emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]

a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]

a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]

The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]

a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the

mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P907 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P908 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #8 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed |

| | |
|---|---|
| | 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date

is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a

fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]

a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).

b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]

Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

i. The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated

within 1 hour.

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements

specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P908 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 0679030152 Emissions Unit ID: P909 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Delacquer unit - existing delacquering furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92) | Particulate emissions (stack only) shall not exceed 1.69 lbs/hr and 7.4 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 0.69 lb/hr and 3.02 tpy.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(d) | [40 CFR 63.1505(d)(1)]<br>The permittee shall not discharge emissions in excess of:<br><br>0.06 pound of THC, as propane, per ton of feed/charge<br><br>0.08 pound of PM per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 3.5 x 10-6 grain per ton of feed/charge;<br><br>0.80 pound of HCl per ton of feed/charge.<br><br>See section A.I.2.a. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 184.1 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-11(B)(2) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

c. The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(g)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter must:

a. For each afterburner,

i. Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

ii. Operate each afterburner in accordance with the OM&M plan.

b. If a bag leak detection system is used to meet the fabric filter monitoring requirements in 40 CFR 63.1510,

i. Initiate corrective action within 1-hour of a bag leak detection system alarm and complete any necessary

corrective action procedures in accordance with the OM&M plan.

ii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
c. If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

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 degrees C (plus 25 degrees F).

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

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(g)]
a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part.

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

i. The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

ii. The monitoring system must record the temperature in 15-minute block averages and determine and

record the average temperature for each 3-hour block period.

iii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).

iv. 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.
c. The owner or operator must conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:

i. Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

ii. Inspection for proper adjustment of combustion air;

iii. Inspection of internal structures (e.g., baffles) to ensure structural integrity;

iv. Inspection of dampers, fans, and blowers for proper operation;

v. Inspection for proper sealing;

vi. Inspection of motors for proper operation;

vii. Inspection of combustion chamber refractory lining and clean and replace lining as necessary;

viii. Inspection of afterburner shell for corrosion and/or hot spots;

ix. Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and

x. Verification that the equipment is maintained in good operating condition.

xi. Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

8. [40 CFR 63.1510(h)]
a. The owner or operator must 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 subpart A of 40 CFR 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

9. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

10. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

11. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.

b. For each affected source with emissions controlled by an afterburner:

i. Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and

ii. Records of annual afterburner inspections.
c. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a),

that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

2. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

3. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

4. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

5. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

6. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

7. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton)

format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

8. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

9. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

10. [40 CFR 63.1513(a)]
Use the following equation to determine compliance with an emission limit for THC:

E = {C x MW x Q x Ka x Kb} / {Mv x P x 1,000,000}

Where,
E = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;
C = Measured volume fraction of pollutant, ppmv;
MW = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole): THC (as propane) = 44.11;
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
Ka = Conversion factor, 1 kg/1,000 g (1 lb/lb);
Kb = Conversion factor, 1,000 L/m3 (1 ft3/ft3);
Mv = Molar volume, 24.45 L/g-mole (385.3 ft3/lb-mole); and
P = Production rate, Mg/hr (ton/hr).

11. [40 CFR 63.1513(b)]
Use the following equation to determine compliance with an emission limit for PM, HCl, and D/F:

E = {C x Q x Ka} / {P}

Where,
E = Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed;
C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf);
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
Ka = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
P = Production rate, Mg/hr (ton/hr).

12. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Emissions of PE shall not exceed 1.69 lbs/hr and 7.4 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in sections A.V.2. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.69 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

Emissions of NOx shall not exceed 0.69 lb/hr and 3.02 tpy.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (0.69 lb/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Permittee shall not discharge emissions in excess of:
0.06 pound of THC, as propane, per ton of feed/charge;
0.08 pound of PM per ton of feed/charge;
3.5 x 10-6 grain of D/F TEQ per ton of feed/charge;
0.80 pound of HCl per ton of feed/charge.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitation:

Emissions of SO2 shall not exceed 184.1 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P909 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P910 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #9 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge; |

| | |
|---|---|
| | Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]

a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]

a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]

The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P910 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P911 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Rotary furnace #10 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01) | Particulate emissions (stack only) shall not exceed 6.57 tpy.<br><br>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.<br><br>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.<br><br>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.<br><br>See section A.I.2.a. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 72.7 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a) Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 Subpart A of 40 CFR Part 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and

complete corrective action, or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority 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 plus or minus 1% 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.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

10. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

11. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour

rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

12. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.11, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

13. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

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

f. Records of annual inspections of emission capture/collection and closed vent systems.

g. Records for any approved alternative monitoring or test procedure.

h. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

i. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep

records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505(k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40

CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: PE shall not exceed 6.57 tpy. Emissions of HCl shall not exceed 6.57 tpy.

Applicable Compliance Method: This allowable limit was determined by multiplying the allowable emission rate, in lb per ton, by the maximum process weight rate and by 8760 hours per year, then dividing by 2000 lbs per ton. Therefore, compliance with the lb per ton limit will result in compliance with the tpy limit.

(0.40 lb/ton)(3.75 ton/hr)(8760 hrs/yr)/(2000 lbs/ton) = 6.57 tpy

b. Emission Limitation: Emissions of NOx shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.47 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation: Emissions of CO shall not exceed 1.25 lbs/hr and 5.43 tpy.

Applicable Compliance Method: Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMBtu, by the maximum Btu rating of

the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (1.25 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation: Visible particulate emissions shall not exceed 10 percent opacity from any add-on air pollution control device for the control of particulates.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

e. Emission Limitations:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method: Compliance shall be demonstrated based upon the testing requirements specified in section A.V.

f. Emission Limitation: Emissions of SO2 shall not exceed 72.7 lbs/hr.

Applicable Compliance Method: Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P911 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 0679030152 Emissions Unit ID: P912 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Reverberatory furnace #1 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-5727 issued 7/21/99) | Particulate emissions (stack only) shall not exceed 3.0 lbs/hr and 13.2.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 3.9 lbs/hr and 17.1 tpy.<br><br>Visible particulate emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 162.9 lbs/hr. |

| | |
|---|---|
| | See section A.I.2.b. |
| OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| OAC rule 3745-21-08(B) | See section A.I.2.c. |
| OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and

ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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.

j. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

k. 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.

7. [40 CFR 63.1510(h)]

a. The owner or operator must 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 subpart A of 40 CFR 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]

a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action. or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]

The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The permittee may apply to the permitting authority 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 plus or minus 1% impracticable. 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 standards.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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.

10. [40 CFR 63.1510(n)]

The owner or operator must:

a. Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace

hearth was also equipped with an add-on control device.

b. Submit a certification of compliance with the operational standards in 40 CFR 63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(iii).

11. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

12. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

13. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.12, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

14. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

15. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

e. Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

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

g. Records of annual inspections of emission capture/collection and closed vent systems.

h. Records for any approved alternative monitoring or test procedure.

i. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

j. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

c. The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must conduct the performance tests required by paragraph (a) or (b) of this section, to measure emissions from both the sidewell and the hearth.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

b. Each in-line fluxer to measure emissions of PM and HCl.

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE from the stack shall not exceed 3.0 lbs/hr and 13.2 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in section A.V. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (3.0 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

Emissions of NOx shall not exceed 3.9 lbs/hr and 17.1 tpy.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMcf, by the maximum rated gas usage of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (3.9 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

d. Emission Limitation:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in sections A.V.

e. Emission Limitation:

Emissions of SO2 shall not exceed 162.9 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P912 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Reverberatory furnace # 1 - existing Group 1 furnace vented to a fabric filter with lime injection | | |

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. The permit to install for this emissions unit (P912) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
Pollutant: hydrogen fluoride

TLV (ug/m3): 2600

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 9.11

MAGLC (ug/m3): 61.90

Pollutant: hydrogen chloride

TLV (ug/m3): 7500

Maximum Hourly Emission Rate (lbs/hr): 1.67

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 11.39

MAGLC (ug/m3): 178.6

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

   The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P913 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Reverberatory furnace #2 - existing Group 1 furnace vented to a fabric filter with lime injection | OAC rule 3745-31-05(A)(3) (PTI 06-5727 issued 7/21/99) | Particulate emissions (stack only) shall not exceed 3.0 lbs/hr and 13.2.<br><br>Emissions of nitrogen oxides (NOx) shall not exceed 3.9 lbs/hr and 17.1 tpy.<br><br>Visible particulate emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR. |
| | 40 CFR 63.1505(i) (Subpart RRR) | The permittee shall not discharge emissions in excess of:<br><br>PM: 0.40 lb per ton of feed/charge;<br><br>Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10-4 grain per ton of feed/charge; and<br><br>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight. |
| | OAC rule 3745-18-06(E)(2) | Emissions of sulfur dioxide (SO2) shall not exceed 162.9 lbs/hr.<br><br>See section A.I.2.b. |
| | OAC rule 3745-17-07 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-17-11 | The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| | OAC rule 3745-21-08(B) | See section A.I.2.c. |
| | OAC rule 3745-23-06(B) | See section A.I.2.c. |

2. **Additional Terms and Conditions**

a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

(a)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

b. The actual SO2 emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

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II. **Operational Restrictions**

1. [40 CFR 63.1506(b)]
The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, 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.

2. [40 CFR 63.1506(c)]
For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);

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.

3. [40 CFR 63.1506(d)]
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, 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.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

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

ii. Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of 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 owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
b. 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 degrees C (plus 25 degrees F).

c. 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 the same level established during the performance test.

d. 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.

e. Operate each sidewell furnace such that:

i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [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 owner or operator must 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.

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III. **Monitoring and/or Record Keeping Requirements**

1. [40 CFR 63.1510(a)]
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.

2. [40 CFR 63.1510(b)]
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. 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 emissions 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 in 40 CFR 63.1505.

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

i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii. 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 40 CFR Part 63.

e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure 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 this section, including:

i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
ii. 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 and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

3. [40 CFR 63.1510(c)]
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]
The owner or operator must:

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 in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must 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 applicable permitting authority 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 plus or minus 1 percent of the weight being measured. The owner or operator 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 owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

b. The owner or operator must 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.

6. [40 CFR 63.1510(f)]
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

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.

j. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

k. 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.

7. [40 CFR 63.1510(h)]
a. The owner or operator must 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 subpart A of 40 CFR 63.

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

i. 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.

ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).

iii. 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.

8. [40 CFR 63.1510(i)(1) and (2)]
a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

i. 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 owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator 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

ii. 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 owner or operator must promptly initiate and complete corrective action. or

iii. 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 owner or operator must promptly initiate and complete corrective action.

b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

9. [40 CFR 63.1510(j)]
The owner or operator must:

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 emissions unit.

i. 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.

ii. The accuracy of the weight measurement device must be plus or minus 1% of the weight of the reactive component of the flux being measured. The permittee may apply to the permitting authority 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 plus or minus 1% impracticable. 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 standards.

iii. The owner or operator must 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 using the procedure in 40 CFR 63.1512(o).

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:

i. gaseous or liquid reactive flux other than chlorine; and

ii. 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 using the procedure in 40 CFR 63.1512(o).

e. The owner or operator of a group 1 furnace or in-line fluxer 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.

10. [40 CFR 63.1510(n)]
The owner or operator must:

a. Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device.

b. Submit a certification of compliance with the operational standards in 40 CFR 63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(iii).

11. [40 CFR 63.1510(s)]
a. An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:

i. the identification of each emissions unit in the secondary aluminum processing unit;

ii. the specific control technology or pollution prevention measure to be used for each emissions unit in the secondary aluminum processing unit and the date of its installation or application;

iii. 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;

iv. information and data demonstrating compliance for each emissions unit with all applicable design, equipment, work practice or operational standards of this subpart; and

v. the monitoring requirements applicable to each emissions unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average (3-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate over the 3 most recent consecutive 24-hour periods) using the procedure in 40 CFR 63.1510(t).
b. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

i. any averaging among emissions of differing pollutants;

ii. the inclusion of any affected sources other than emissions units in a secondary aluminum processing unit;

iii. the inclusion of any emissions unit while it is shut down; or

iv. the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

c. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to the Ohio EPA, Southeast District Office containing the information required by paragraph (a) of this section and obtain approval of the Ohio EPA, Southeast District Office prior to implementing any revisions.

12. [40 CFR 63.1510(t)]
Except as provided in section A.III.12, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

a. Calculate and record the total weight of material charged to each emissions unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the owner or operator chooses to comply on the basis of weight of

aluminum produced by the emissions unit, rather than weight of material charged to the emissions unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

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

c. 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.

d. Compute the 24-hour daily emission rate using the equation in 40 CFR 63.1510(t)(4).

e. 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.

13. [40 CFR 63.1510(u)]
As an alternative to the procedures of section A.III.12, the owner or operator may demonstrate, through performance tests, that each individual emissions unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emissions unit.

14. [40 CFR 63.1517(a)]
As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

a. The owner or operator must 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.

b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

15. [40 CFR 63.1517(b)]
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records
of:

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.
b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

i. 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;

ii. If lime feeder setting is monitored, records of daily 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.

iii. 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).

c. 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.
d. 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.

e. Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

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

g. Records of annual inspections of emission capture/collection and closed vent systems.

h. Records for any approved alternative monitoring or test procedure.

i. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

i. Startup, shutdown, and malfunction plan;

ii. For major sources, OM&M plan; and

iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

j. 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.

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IV. **Reporting Requirements**

1. [40 CFR 63.1515(a)]
The owner or operator must submit initial notifications to the applicable permitting authority as follows:

a. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

b. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must 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.

2. [40 CFR 63.1515(b)]
Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. 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 paragraphs (a)(i) through (x) of this section. 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, afterburner operating temperature, 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. Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).

h. Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

j. Startup, shutdown, and malfunction plan, with revisions.

3. [40 CFR 63.1516(a)]
The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a

startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4. [40 CFR 63.1516(b)]
As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10 (c). 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:

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

ii. The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

iii. The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

iv. 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).

v. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).

vi. An affected source was not operated according to the requirements of this subpart.
b. The owner or operator must 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.

5. [40 CFR 63.1516(c)]
For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

a. Any period of excess emissions, as defined in paragraph 40 CFR 63.1516(b)(1) (see section A.IV.4.a), that occurred during the year were reported as required by this subpart; and

b. All monitoring, record keeping, and reporting requirements were met during the year.

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V. **Testing Requirements**

1. [40 CFR 63.1513(e)]
The equation contained in 40 CFR 63.1513(e)(1) shall be used to determine compliance with the mass-weighted PM emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 1 in 40 CFR 63.1505(k).

The equation contained in 40 CFR 63.1513(e)(2) shall be used to determine compliance with the aluminum mass-weighted HCl emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 2 in 40 CFR 63.1505 (k).

The equation contained in 40 CFR 63.1513(e)(3) shall be used to determine compliance with the aluminum mass-weighted D/F emission limits for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit calculated using Equation 3 in 40 CFR 63.1505 (k).

As an alternative to using the equations in this section, the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in 40 CFR 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in 40 CFR 63.1505(j).

2. [40 CFR 63.1511(a)]
Prior to conducting a performance test required by this section, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in 40 CFR 63.7(c).

3. [40 CFR 63.1511(b)]
Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emissions unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). The owner or operator must conduct each performance test according to the requirements

of the general provisions in Subpart A of 40 CFR Part 63 and this permit.

a. The owner or operator must conduct each test while the affected source or emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

b. Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

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.

d. Where multiple affected sources or emissions 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 emissions 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.

4. [40 CFR 63.1511(c)]
The owner or operator must use the following methods in Appendix A to 40 CFR Part 60 to determine compliance with the applicable emission limits or standards:

a. Method 1 for sample and velocity traverses.
b. Method 2 for velocity and volumetric flow rate.
c. Method 3 for gas analysis.
d. Method 4 for moisture content of the stack gas.
e. Method 5 for the concentration of PM.
f. Method 9 for visible emission observations.
g. Method 23 for the concentration of D/F.
h. Method 25A for the concentration of THC, as propane.
i. Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the permittee must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

5. [40 CFR 63.1511(d)]
The owner or operator may use an alternative test method, subject to approval by the Administrator.

6. [40 CFR 63.1511(e)]
The owner or operator of new or existing affected sources and emissions units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

7. [40 CFR 63.1511(g)]
The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 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 procedures in this section and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

a. The complete emission test report(s) used as the basis of the parameter(s) is submitted.

b. The same test methods and procedures as required by this subpart were used in the test.

c. The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

d. All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

8. [40 CFR 63.1512(d)]
a. The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

b. The owner or operator 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. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

c. The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must conduct the performance tests required by paragraph (a) or (b) of this section, to measure emissions from both the sidewell and the hearth.

9. [40 CFR 63.1512(j)]
The owner or operator must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and g 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:

a. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

i. emissions of HCl (for the emission limit); or

ii. the mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

b. Each in-line fluxer to measure emissions of PM and HCl.

10. [40 CFR 63.1512(k)]
During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must 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. An owner or operator 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.

11. [40 CFR 63.1512(n)]
The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these 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 HCl and 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.

12. [40 CFR 63.1512(o)]
The owner or operator must use these 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 HCl and 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 by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5 of 40 CFR 63.1512(o);

d. Divide the weight of total chlorine 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 is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

13. [40 CFR 63.1512(p)]
The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and 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 for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

14. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE from the stack shall not exceed 3.0 lbs/hr and 13.2 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in section A.V. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (3.0 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

Emissions of NOx shall not exceed 3.9 lbs/hr and 17.1 tpy.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor for natural gas combustion, from AP-42 Table 1.4-1 (7/98), in lb per MMcf, by the maximum rated gas usage of the burner to obtain the hourly emission rate. The annual allowable was developed by multiplying the maximum hourly allowable particulate emission rate (3.9 lbs/hr) by the maximum annual hours of operation (8760 hours), and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

d. Emission Limitation:

0.40 pound of particulate emissions per ton of feed/charge
2.1 x 10-4 gr of D/F TEQ per ton of feed/charge
0.40 pound of HCl per ton of feed/charge

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in sections A.V.

e. Emission Limitation:

Emissions of SO2 shall not exceed 162.9 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 0679030152 Emissions Unit ID: P913 Issuance type: Title V Proposed Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Reverberatory furnace # 1 - existing Group 1 furnace vented to a fabric filter with lime injection | | |

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. The permit to install for this emissions unit (P912) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
Pollutant: hydrogen fluoride

TLV (ug/m3): 2600

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 9.11

MAGLC (ug/m3): 61.90

Pollutant: hydrogen chloride

TLV (ug/m3): 7500

Maximum Hourly Emission Rate (lbs/hr): 1.67

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.39

MAGLC (ug/m3): 178.6

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None