AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name: Commonwealth Rolled Products, Inc.
Mailing Address: 1372 State Road 1957, Lewisport, Kentucky 42351

Source Name: Commonwealth Rolled Products, Inc.
Mailing Address: 1372 State Road 1957, Lewisport, Kentucky 42351

Source Location: Hancock County

Permit ID: V-20-032 R2
Agency Interest #: 1622
Activity ID: APE20220002
Review Type: Title V, Construction / Operating
Source ID: 21-091-00010

Regional Office: Owensboro Regional Office
3032 Alvey Park Dr. W., Suite 700
Owensboro, KY 42303
(270) 687-7304

County: Hancock

Application Complete Date: August 23, 2019
Issuance Date: October 31, 2021
Revision Date: 
Expiration Date: October 31, 2026

For Michael J. Kennedy, P.E.
Director
Division for Air Quality

Version 4/1/2022
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<th>Complete Date</th>
<th>Issuance Date</th>
<th>Summary of Action</th>
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<td>V-20-032</td>
<td>Renewal</td>
<td>APE20190002</td>
<td>08/31/2019</td>
<td>10/31/2021</td>
<td>Permit Renewal, Revisions to CALP Project Emission Limits</td>
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<td>Minor Revision</td>
<td>APE20220001</td>
<td>03/25/2022</td>
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<td>07/13/2022</td>
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<td>Added EUs 01A, 134 &amp; IA 36, Removed EUs 01 &amp; 09</td>
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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
### Emission Group A – Group 1 Furnaces Without Control

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Maximum Burner Capacity (MMBtu/hr)</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
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<tr>
<td>01A</td>
<td>Melt Furnace #1A</td>
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<td>53,000</td>
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<tr>
<td>02-01</td>
<td>Melt Furnace #2</td>
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<td>105,120</td>
<td>52</td>
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<td>02-02</td>
<td>Holding Furnace #1</td>
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<td>Melt Furnace #3</td>
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<td>Melt Furnace #7</td>
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<td>W-5 Melt Furnace</td>
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<td>15</td>
<td>C-4 Hold Furnace</td>
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<td>20.4</td>
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<td>16</td>
<td>C-3 Hold Furnace</td>
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<td>20.4</td>
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<td>C-2 Hold Furnace</td>
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<td>C-1 Hold Furnace</td>
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<td>A3</td>
<td>W-2 Melt Furnace Burner Section (Main Hearth)</td>
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<td></td>
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<td>33,000 Non-Painted Al/salt</td>
<td></td>
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<td></td>
<td></td>
<td>4,000 Sow</td>
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</tbody>
</table>

### APPLICABLE REGULATIONS:

- **401 KAR 59:010, New process operations**, applies to EUs 01A, 06 to 08, 10, 11, 14 to 18, & A3
- **401 KAR 61:020, Existing process operations**, applies to EUs 02 to 05
- **401 KAR 63:002, Section (2)(4)(ccc), 40 C.F.R. 63.1500 to 63.1519, Tables 1 to 3, and Appendix A (Subpart RRR), National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production**

### PRECLUDED REGULATIONS:

- **401 KAR 51:017, Prevention of significant deterioration of air quality**
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations:
   a. For EU's 15, 16, 17, and 18: The permittee shall not allow the heat input to exceed 18 MMBtu/hr, each. [To preclude 401 KAR 51:017]

   Compliance Demonstration Method:
   The permittee shall verify, monthly, for each month in the reporting period, using the records required by 5. Specific Recordkeeping Requirements (a), that the heat input rate did not exceed 18 MMBtu/hr for any of the listed units. For each unit, the permittee shall divide the total gas usage for the applicable month by the hours of operation to determine the heat input rate. The permittee shall certify annually that no heat input rate exceeded 18 MMBtu/hr during the reporting period.

   b. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.1506(a)(5)]

   c. Labeling. The permittee must provide and maintain easily visible labels posted at each group 1 furnace that identifies the applicable emission limits and means of compliance, including: [40 CFR 63.1506(b)]
      i. The type of affected source or emission unit (e.g., group 1 furnace). [40 CFR 63.1506(b)(1)]
      ii. 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. [40 CFR 63.1506(b)(2)]

   d. Feed/charge weight. The permittee of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must: [40 CFR 63.1506(d)]
      i. Except as provided in 40 CFR 63.1506(d)(3), 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 [40 CFR 63.1506(d)(1)]
      ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan. [40 CFR 63.1506(d)(2)]
      iii. The permittee may choose 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: [40 CFR 63.1506(d)(3)]
         1) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and [40 CFR 63.1506(d)(3)(i)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight. [40 CFR 63.1506(d)(3)(ii)]

e. **Group 1 furnace without add-on air pollution control devices.** The permittee of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must: [40 CFR 63.1506(n)]

i. Maintain the total reactive chlorine flux injection rate and fluorine 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. [40 CFR 63.1506(n)(1)]

ii. Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan. [40 CFR 63.1506(n)(2)]

iii. Operate each group 1 melting/holding furnace subject to the emission standards in 40 CFR 63.1505(i)(2) using only clean charge as the feedstock. [40 CFR 63.1506(n)(3)]

f. **Corrective action.** When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee 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. [40 CFR 63.1506(p)]

g. **Operation, maintenance, and monitoring (OM&M) plan.** The permittee must prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The permittee of an existing affected source must submit the OM&M plan to the Division no later than the compliance date established by 40 CFR 63.1501. The permittee of any new affected source must submit the OM&M plan to the Division within 90 days after a successful initial performance test under 40 CFR 63.1511(b). The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63, Subpart RRR. The permittee must comply with all of the provisions of the OM&M plan as submitted to the Division, unless and until the plan is revised in accordance with the procedures in 6. **Specific Reporting Requirements (a).** Each plan must contain the following information: [40 CFR 63.1510(b)]

i. 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. [40 CFR 63.1510(b)(1)]

ii. A monitoring schedule for each affected source and emission unit. [40 CFR 63.1510(b)(2)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. 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. [40 CFR 63.1510(b)(3)]

iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: [40 CFR 63.1510(b)(4)]
   1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and [40 CFR 63.1510(b)(4)(i)]
   2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, subpart A. [40 CFR 63.1510(b)(4)(ii)]

v. Procedures for monitoring process and control device parameters, including lime injection rates, 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. [40 CFR 63.1510(b)(5)]

vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including: [40 CFR 63.1510(b)(6)]
   1) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and [40 CFR 63.1510(b)(6)(i)]
   2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed. [40 CFR 63.1510(b)(6)(ii)]

vii. 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. [40 CFR 63.1510(b)(7)]

viii. 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. [40 CFR 63.1510(b)(8)]

h. Prior to changing furnace classifications to those not already authorized in SECTION B, the permittee shall submit a permit application to incorporate the applicable standards from 40 CFR 63, Subpart RRR. [401 KAR 52:020, Section 7]

i. For SAPU requirements, refer to SECTION D(4).

j. The permittee shall limit aluminum throughput to EU 01A to less than 53,000 tons/yr, on a 12-month rolling basis. [To preclude 401 KAR 51:017]

k. The permittee shall limit usage of natural gas in EU 01A to less than 198.8 MMscf/yr, on a 12-month rolling basis. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:
   a. The permittee shall not allow the emissions of filterable PM$_{10}$ to exceed the following limits on a rolling 12-month basis: [To preclude 401 KAR 51:017]
      i. For EU 02-02, 03-02, 04-02, 05-02, 07, & 11: 3.57 tons/yr, each.
      ii. For EU A3: 3.22 tons/yr
   Compliance Demonstration Method:
   Refer to SECTION D(3) for calculations related to the ton per year limits.

   b. Opacity Standard for Emission Units 01A, 06 to 08, 10, 11, 14 to 18, & A3: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

   c. Opacity Standard for Emission Units 02, 03, 04, & 05: The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than forty (40) percent opacity. [401 KAR 61:020, Section 3(1)(a)]

   Compliance Demonstration Method:
   For compliance with 2. Emission Limitations (b) and (c), refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

   d. Mass Emission Standard for Emission Units 01A, 06 to 08, 10, 11, 14 to 18, & A3: The permittee shall not cause, suffer, allow or permit the emission into the open air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
      i. For process weights < 0.5 tons/hour: \( E = 2.34 \)
      ii. For process weights < 30 tons/hour: \( E = 3.59P^{0.62} \)
         Where:
         \( E \) is the rate of the emission in lb/hour
         \( P \) is the process weight rate in tons/hour
   Compliance Demonstration Method:
   Results from the tests required by 3. Testing Requirements (b) shall be converted into lb/hr and shall be compared to the allowable emission rate determined by 2. Emission Limitation (d).

   e. Mass Emission Standard for Emission Units 02, 03, 04, & 05: The permittee shall not cause, suffer, allow or permit the emission in the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 61:020, Appendix A. [401 KAR 61:020, Section 3(2)(a)]
      i. For process weights < 0.5 tons/hour: \( E = 2.58 \)
      ii. For process weights < 30 tons/hour: \( E = 4.10P^{0.67} \)
         Where:
         \( E \) is the rate of emission in lb/hour and
         \( P \) is the process weight rate in tons/hour
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Results from the tests required by 3. Testing Requirements (b) shall be converted into lb/hr and shall be compared to the allowable emission rate determined by 2. Emission Limitation (e).

f. The permittee has a choice to limit emissions from the furnaces on an individual basis or as part of a Secondary Aluminum Processing Unit (SAPU), included in the OM&M plan. On an individual basis, the permittee shall not allow the emissions from the furnaces to exceed the following: [40 CFR 63.1505(i), (k)]

i. 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge; [40 CFR 63.1505(i)(1)]

ii. 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge; [40 CFR 63.1505(i)(2)]

iii. 15 µg of D/F TEQ per Mg (2.1 × 10^{-4} gr of D/F TEQ per ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge; and [40 CFR 63.1505(i)(3)]

iv. 0.20 kg of HF per Mg (0.40 lb of HF per ton) of feed/charge from an uncontrolled group 1 furnace and 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge. [40 CFR 63.1505(i)(4)]

v. The permittee may determine the emission standards for SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge. [40 CFR 63.1505(i)(6)]

vi. The permittee of a sidewall 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, shall comply with the emission limits of 40 CFR 63.1505(i)(1) through (4) on the basis of the combined emissions from the sidewell and the hearth [40 CFR 63.1505(i)(7)]

Compliance Demonstration Method:
A. The permittee shall demonstrate compliance using the equations in 40 CFR 63.1513 and by meeting the requirements in 3. Testing Requirements, 4. Specific Monitoring Requirements, 5. Specific Recordkeeping Requirements, 6. Specific Reporting Requirements.

B. Periods of startup and shutdown. For a new or existing affected source, or a new or existing emission unit subject to an emissions limit in 40 CFR 63.1505(b) through (j) expressed in units of pounds per ton of feed/charge, or µg TEQ or ng TEQ per Mg of feed/charge, demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1) or determine the emissions per unit of feed/charge during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(2). Startup and shutdown emissions for group 1 furnaces and in-line fluxers must be calculated individually, and not on the basis of a SAPU. Periods of startup and shutdown are excluded from the calculation of SAPU emission limits in 40 CFR 63.1505(k), the SAPU monitoring requirements in 40 CFR 63.1510(t) and the SAPU emissions calculations in 40 CFR 63.1513(e). [40 CFR 63.1513(f)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. For periods of startup and shutdown, records establishing a feed/charge rate of zero, a flux rate of zero, and that the affected source or emission unit was either heated with electricity, propane or natural gas as the sole sources of heat or was not heated, may be used to demonstrate compliance with the emission limit, or [40 CFR 63.1513(f)(1)]

ii. For periods of startup and shutdown, divide the measured emissions in lb/hr or µg/hr or ng/hr by the feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data are available. [40 CFR 63.1513(f)(2)]

g. For SAPU requirements, refer to SECTION D(4).

h. The permittee shall not allow the emissions of PM₂.₅ and NOₓ to exceed the following limits on a 12-month rolling basis: [To preclude 401 KAR 51:017]

i. For EU 01A: 4.82 tons/yr for PM₂.₅; and

ii. For EU 01A: 7.23 tons/yr for NOₓ.

Compliance Demonstration Method:
Refer to SECTION D(3) for calculations related to the ton per year limits.

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2), 401 KAR 61:005, Section 2(1), and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

b. The permittee shall conduct stack testing for PM₁₀ on EU 02-02, 03-02, 04-02, 05-02, 07, 11, and A3 once every 5 years using 40 CFR 51, Appendix M, Method 201A and 40 CFR 60, Appendix A, Method 5 (or an alternate method as approved by the Division). This testing shall be used to establish emission factors and demonstrate compliance with the PM₁₀ limit in 2. Emission Limitations. The permittee may petition the Division for approval to test a subset of the listed units if the permittee demonstrates that the emissions of the tested units are representative of the emissions of the untested units.

c. Prior to conducting any performance test required by 40 CFR 63, Subpart RRR, the permittee must prepare a site-specific test plan which satisfies all of the rule requirements, and must obtain approval of the plan pursuant to the procedures set forth in 40 CFR 63.7. Performance tests shall be conducted under such conditions as the Administrator specifies to the permittee based on representative performance of the affected source for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.1511(a)]

d. Initial performance test. 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 emission unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). Except for the date by which the performance test must be conducted, the permittee must
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c). [40 CFR 63.1511(b)]

i. The performance tests must be conducted under representative conditions expected to produce the highest level of HAP emissions expressed in the units of the emission standards for the HAP (considering the extent of feed/charge contamination, reactive flux addition rate and feed/charge rate). If a single test condition is not expected to produce the highest level of emissions for all HAP, testing under two or more sets of conditions (for example high contamination at low feed/charge rate, and low contamination at high feed/charge rate) may be required. Any subsequent performance tests for the purposes of establishing new or revised parametric limits shall be allowed upon pre-approval from the Division. These new parametric settings shall be used to demonstrate compliance for the period being tested. [40 CFR 63.1511(b)(1)]

ii. Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle. Additionally, for batch processes where the length of the process operating cycle is not known in advance, and where isokinetic sampling must be conducted based on the procedures in Method 5 in appendix A to part 60, use the following procedure to ensure that sampling is conducted over the entire process operating cycle: [40 CFR 63.1511(b)(3)]

1) Choose a minimum operating cycle length and begin sampling assuming this minimum length will be the run time (e.g., if the process operating cycle is known to last from four to six hours, then assume a sampling time of four hours and divide the sampling time evenly between the required number of traverse points); [40 CFR 63.1511(b)(3)(i)]

2) After each traverse point has been sampled once, begin sampling each point again for the same time per point, in the reverse order, until the operating cycle is complete. All traverse points as required by Method 1 of appendix A to part 60, must be sampled at least once during each test run; [40 CFR 63.1511(b)(3)(ii)]

3) In order to distribute the sampling time most evenly over all the traverse points, do not perform all runs using the same sampling point order (e.g., if there are four ports and sampling for run 1 began in port 1, then sampling for run 2 could begin in port 4 and continue in reverse order.) [40 CFR 63.1511(b)(3)(iii)]

iii. Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter. [40 CFR 63.1511(b)(4)]

iv. 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. [40 CFR 63.1511(b)(5)]

v. Apply 40 CFR 63.1511(b)(1) through (5) for each pollutant separately if a different production rate, charge material or, if applicable, reactive fluxing rate would apply and thereby result in a higher expected emissions rate for that pollutant. [40 CFR 63.1511(b)(6)]

vi. The permittee may not conduct performance tests during periods of malfunction. [40 CFR 63.1511(b)(7)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. **Test methods.** 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: [40 CFR 63.1511(c)]
   i. Method 1 for sample and velocity traverses. [40 CFR 63.1511(c)(1)]
   ii. Method 2 for velocity and volumetric flow rate. [40 CFR 63.1511(c)(2)]
   iii. Method 3 for gas analysis. [40 CFR 63.1511(c)(3)]
   iv. Method 4 for moisture content of the stack gas. [40 CFR 63.1511(c)(4)]
   v. Method 5 for the concentration of PM. [40 CFR 63.1511(c)(5)]
   vi. Method 9 for visible emission observations. [40 CFR 63.1511(c)(6)]
   vii. Method 23 for the concentration of D/F. [40 CFR 63.1511(c)(7)]
   viii. Method 26A for the concentration of HCl and HF. Method 26 may also be used, except at sources where entrained water droplets are present in the emission stream. [40 CFR 63.1511(c)(9)]

f. **Alternative methods.** The permittee may use an alternative test method approved by the Administrator. [40 CFR 63.1511(d)(3)]

g. **Repeat tests.** The permittee must conduct a performance test every 5 years following the initial performance test. [40 CFR 63.1511(e)]

h. **Testing of representative emission units.** With the prior approval of the Division, the permittee may utilize emission rates obtained by testing a particular type of group 1 furnace that does not have an add-on air pollution control device to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied: [40 CFR 63.1511(f)]
   i. The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents; [40 CFR 63.1511(f)(1)]
   ii. The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents; [40 CFR 63.1511(f)(2)]
   iii. The tested emission unit must be operated utilizing the same work practices as the emission units that it represents; [40 CFR 63.1511(f)(3)]
   iv. The tested emission unit must be of the same design as the emission units that it represents; and [40 CFR 63.1511(f)(4)]
   v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents. [40 CFR 63.1511(f)(5)]
   vi. All 3 separate runs of a performance test must be conducted on the same emission unit. [40 CFR 63.1511(f)(6)]

i. **Establishment of monitoring and operating parameter values.** The permittee 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 permittee must use the appropriate procedures in 40 CFR 63.1511 and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

status report. The permittee 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 Division: [40 CFR 63.1511(g)]

i. The complete emission test report(s) used as the basis of the parameter(s) is submitted. [40 CFR 63.1511(g)(1)]

ii. The same test methods and procedures as required by 40 CFR 63, Subpart RRR were used in the test. [40 CFR 63.1511(g)(2)]

iii. The permittee 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. [40 CFR 63.1511(g)(3)]

iv. All process and control equipment operating parameters required to be monitored were monitored as required in 40 CFR 63, Subpart RRR and documented in the test report. [40 CFR 63.1511(g)(4)]

v. If the permittee wants to conduct a new performance test and establish different operating parameter values, they must submit a revised site specific test plan and receive approval in accordance with 40 CFR 63.1511(a). In addition, if an permittee wants to use existing data in addition to the results of the new performance test to establish operating parameter values, they must meet the requirements in 40 CFR 63.1511(g)(1) through (4). [40 CFR 63.1511(g)(5)]

j. In the site-specific monitoring plan required by 40 CFR 63.1510(o), the permittee of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits. [40 CFR 63.1512(e)]

i. If the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of PM, HCl, HF, and D/F at the furnace exhaust outlet. [40 CFR 63.1512(e)(1)]

ii. If the group 1 furnace processes only clean charge, the permittee must conduct emission tests to simultaneously measure emissions of PM, HCl and HF. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge. [40 CFR 63.1512(e)(2)]

iii. The permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all chlorine and fluorine contained in reactive flux added to the group 1 furnace is emitted as HCl and HF. Under these circumstances, the permittee is not required to conduct an emission test for HCl or HF. [40 CFR 63.1512(e)(3)]

iv. When testing an existing uncontrolled furnace, the permittee must comply with the requirements of either 40 CFR 63.1512(e)(4)(i), (ii), or (iii) at the next required performance test required by 40 CFR 63.1511(e). [40 CFR 63.1512(e)(4)]

1) Install hooding that meets ACGIH Guidelines (incorporated by reference, see 40 CFR 63.14), or [40 CFR 63.1512(e)(4)(i)]

2) At least 180 days prior to testing petition the Division, that such hoods are impractical under the provisions of 40 CFR 63.1512(e)(6) and propose testing procedures that will minimize unmeasured emissions during the performance test according to 40 CFR 63.1512(e)(7), or [40 CFR 63.1512(e)(4)(ii)]
3) Assume an 80-percent capture efficiency for the furnace exhaust (i.e., multiply emissions measured at the furnace exhaust outlet by 1.25). If the source fails to demonstrate compliance using the 80-percent capture efficiency assumption, the permittee must re-test with a hood that meets the ACGIH Guidelines within 180 days, or petition the Division within 180 days that such hoods are impractical under the provisions of 40 CFR 63.1512(e)(4)(iii) and propose testing procedures that will minimize unmeasured emissions during the performance test according to 40 CFR 63.1512(e)(7). [40 CFR 63.1512(e)(4)(iii)]

4) The 80-percent capture efficiency assumption is not applicable in the event of testing conducted under an approved petition submitted pursuant to 40 CFR 63.1512(e)(4)(ii) or (iii). [40 CFR 63.1512(e)(4)(iv)]

v. When testing a new uncontrolled furnace, other than a new round top furnace, constructed after February 14, 2012, the permittee must comply with the requirements of 40 CFR 63.1512(e)(5)(i) or (ii) at the next required performance test required by 40 CFR 63.1511(e). [40 CFR 63.1512(e)(5)]

vi. The installation of hooding that meets ACGIH Guidelines (incorporated by reference, see 40 CFR 63.14) is considered impractical if any of the following conditions exist: [40 CFR 63.1512(e)(6)]

1) Building or equipment obstructions (for example, wall, ceiling, roof, structural beams, utilities, overhead crane or other obstructions) are present such that the temporary hood cannot be located consistent with acceptable hood design and installation practices; [40 CFR 63.1512(e)(6)(i)]

2) Space limitations or work area constraints exist such that the temporary hood cannot be supported or located to prevent interference with normal furnace operations or avoid unsafe working conditions for the furnace operator; or [40 CFR 63.1512(e)(6)(ii)]

3) Other obstructions and limitations subject to agreement of the Division. [40 CFR 63.1512(e)(6)(iii)]

vii. Testing procedures that will minimize unmeasured emissions may include, but are not limited to the following: [40 CFR 63.1512(e)(7)]

1) Installing a hood that does not entirely meet ACGIH guidelines; [40 CFR 63.1512(e)(7)(i)]

2) Using the building as an enclosure, and measuring emissions exhausted from the building if there are no other furnaces or other significant sources in the building of the pollutants to be measured; [40 CFR 63.1512(e)(7)(ii)]

3) Installing temporary baffles on those sides or top of furnace opening if it is practical to do so where they will not interfere with material handling or with the furnace door opening and closing; [40 CFR 63.1512(e)(7)(iii)]

4) Minimizing the time the furnace doors are open; [40 CFR 63.1512(e)(7)(iv)]

5) Delaying gaseous reactive fluxing until charging doors are closed; [40 CFR 63.1512(e)(7)(v)]

6) Agitating or stirring molten metal as soon as practicable after salt flux addition and closing doors as soon as possible after solid fluxing operations, including mixing and dross removal; [40 CFR 63.1512(e)(7)(vi)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7) Keeping building doors and other openings closed to the greatest extent possible to minimize drafts that would divert emissions from being drawn into the furnace; [40 CFR 63.1512(e)(7)(vii)]

8) Maintaining burners on low-fire or pilot operation while the doors are open or the top is off; [40 CFR 63.1512(e)(7)(viii)]

9) Use of fans or other device to direct flow into a furnace when door is open; or [40 CFR 63.1512(e)(7)(ix)]

k. Feed/charge weight measurement. During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the permittee 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. The permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight. [40 CFR 63.1512(k)]

l. Flux injection rate. The permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate and, for uncontrolled furnaces, the total reactive fluorine flux injection rate. [40 CFR 63.1512(o)]

i. Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl, HF 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; [40 CFR 63.1512(o)(1)]

ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs; [40 CFR 63.1512(o)(2)]

iii. Determine the total reactive chlorine flux injection rate and, for uncontrolled furnaces, the total reactive fluorine flux injection rate by adding the recorded measurement of the total weight of chlorine and, for uncontrolled furnaces, fluorine in the gaseous or liquid reactive flux injected and the total weight of chlorine and, for uncontrolled furnaces, fluorine in the solid reactive flux using the following equation: [40 CFR 63.1512(o)(3)]

\[ W_t = F_1W_1 + F_2W_2 \]

Where:
- \( W_t \) = Total chlorine or fluorine usage, by weight;
- \( F_1 \) = Fraction of gaseous or liquid flux that is chlorine or fluorine;
- \( W_1 \) = Weight of reactive flux gas injected;
- \( F_2 \) = Fraction of solid reactive chloride flux that is chlorine (e.g., \( F = 0.75 \) for magnesium chloride) or fraction of solid reactive fluoride flux that is fluorine (e.g., \( F = 0.33 \) for potassium fluoride); and
- \( W_2 \) = Weight of solid reactive flux;

iv. Divide the weight of total chlorine or fluorine usage (\( W_t \)) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and [40 CFR 63.1512(o)(4)]

v. If a solid reactive flux other than magnesium chloride or potassium fluoride is used, the permittee must derive the appropriate proportion factor subject to approval by the Division. [40 CFR 63.1512(o)(5)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

m. Use the following equation to determine compliance with an emission limit for PM, HCl or HF: [40 CFR 63.1513(b)(1)]

\[ E = \frac{C \times Q \times K_1}{P} \]

Where:
- \( E \) = Emission rate of PM, HCl or HF, in lb/ton (kg/Mg) of feed;
- \( C \) = Concentration of PM, HCl or HF, in gr/dscf (g/dscm);
- \( Q \) = Volumetric flow rate of exhaust gases, in dscf/hr (dscm/hr);
- \( K_1 \) = Conversion factor, 1 lb/7,000 gr (1 kg/1,000 g); and
- \( P \) = Production rate, in ton/hr (Mg/hr).

n. Use the following equation to determine compliance with an emission limit for D/F: [40 CFR 63.1513(b)(2)]

\[ E = \frac{C \times Q}{P} \]

Where:
- \( E \) = Emission rate of D/F, in gr/ton (µg/Mg) of feed;
- \( C \) = Concentration of D/F, in gr/dscf (µg/dscm);
- \( Q \) = Volumetric flow rate of exhaust gases, in dscf/hr (dscm/hr); and
- \( P \) = Production rate, in ton/hr (Mg/hr).

o. Conversion of D/F measurements to TEQ units. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and –Dibenzofurans (CDDs and CDFs) and 1989 Update, incorporated by reference see 40 CFR 63.14. [40 CFR 63.1513(d)]

p. For SAPU requirements, refer to SECTION D(4).

q. Within 60 days after achieving the maximum production rate at which the EU 01A will be operated but not later than 180 days after initial startup, the permittee shall complete performance testing for PM_{2.5} emissions using U.S. EPA Method 5 and 202 or an equivalent method approved by the Division and for NO\textsubscript{x} emissions using U.S. EPA Method 7E or an equivalent method approved by the Division at the melt furnace stack. This test shall be repeated once every 5 years. [To preclude 401 KAR 51:017]

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
      ii. Process weight in tons of each batch;
      iii. Monthly number of batches; and

   b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility
is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

c. Labeling. The permittee must inspect the labels for each group 1 furnace 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. [40 CFR 63.1510(c)]

d. Feed/charge weight. The permittee of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/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 permittee may use a procedure acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR 63.1510(e)]

  i. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The permittee may apply to the Division for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard. [40 CFR 63.1510(e)(1)]

  ii. The permittee 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. [40 CFR 63.1510(e)(2)]

e. Total reactive flux injection rate. The permittee must: [40 CFR 63.1510(j)]

  i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit. [40 CFR 63.1510(j)(1)]

    1) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. [40 CFR 63.1510(j)(1)(i)]

    2) The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Division for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards. [40 CFR 63.1510(j)(1)(ii)]
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3) The permittee 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. [40 CFR 63.1510(j)(1)(iii)]

ii. 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). [40 CFR 63.1510(j)(2)]

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

1) Gaseous or liquid reactive flux other than chlorine; and [40 CFR 63.1510(j)(3)(i)]
2) Solid reactive flux. [40 CFR 63.1510(j)(3)(ii)]

iv. 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). For solid flux that is added intermittently, record the amount added for each operating cycle or time period used in the performance test using the procedures in 40 CFR 63.1512(o). [40 CFR 63.1510(j)(4)]

v. The permittee of a group 1 furnace 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. [40 CFR 63.1510(j)(5)]

f. Group 1 furnace without add-on air pollution control devices. These requirements apply to the permittee of a group 1 furnace that is not equipped with an add-on air pollution control device. [40 CFR 63.1510(o)]

i. The permittee must develop, in consultation with the Division, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the Division as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces), and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) that will be emitted from the furnace in accordance with 40 CFR 63.1511(b)(1). If the Division determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of 40 CFR 63.1510 or 40 CFR 63, Subpart RRR, the permittee must promptly make all necessary revisions and resubmit the revised plan. [40 CFR 63.1510(o)(1)]

1) The permittee of an existing affected source must submit the site-specific monitoring plan to the Division for review at least 6 months prior to the compliance date. [40 CFR 63.1510(o)(1)(i)]

2) The Division will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on
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documented test results, the relationship between emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) that will be emitted from the furnace. Subject to approval of the OM&M plan, the highest levels may be determined by conducting performance tests and monitoring operating parameters in accordance with 40 CFR 63.1511(b)(1). [40 CFR 63.1510(o)(1)(ii)]

ii. Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards. [40 CFR 63.1510(o)(2)]

iii. Each site-specific monitoring plan must include provisions for unit labeling as required in 40 CFR 63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40 CFR 63.1510(e) and flux weight measurement as required in 40 CFR 63.1510(j). [40 CFR 63.1510(o)(3)]

iv. Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in 40 CFR 63.1505(i)(3) must include these requirements: [40 CFR 63.1510(o)(4)]

1) The permittee must record the type of feed/charge (e.g., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and [40 CFR 63.1510(o)(4)(i)]

2) The permittee must submit a certification of compliance with the applicable operational standard for clean charge materials in 40 CFR 63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(iv). [40 CFR 63.1510(o)(4)(ii)]

v. If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in 40 CFR 63, subpart A. [40 CFR 63.1510(o)(5)]

vi. If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1510(o)(6)]

vii. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR 63.1510(p). [40 CFR 63.1510(o)(7)]

1) Scrap inspection program for group 1 furnace without add-on air pollution control devices. A scrap inspection program must include: [40 CFR 63.1510(p)]

A. A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples; [40 CFR 63.1510(p)(1)]

B. A scrap inspector training program; [40 CFR 63.1510(p)(2)]

C. An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples; [40 CFR 63.1510(p)(3)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results; [40 CFR 63.1510(p)(4)]

E. A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and [40 CFR 63.1510(p)(5)]

F. Recordkeeping requirements to document conformance with plan requirements. [40 CFR 63.1510(p)(6)]

viii. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR 63.1510(q). [40 CFR 63.1510(o)(8)]

1) Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices. The permittee of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include: [40 CFR 63.1510(q)]

A. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test. [40 CFR 63.1510(q)(1)]

B. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test. [40 CFR 63.1510(q)(2)]

C. Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace. [40 CFR 63.1510(q)(3)]

g. For SAPU requirements, refer to SECTION D(4).

h. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]

i. Monthly hours of operation;

ii. Process weight in tons for each batch;

iii. Monthly number of batches; and


b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any
**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

c. Except as provided in 40 CFR 63.1510(u), the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) for each secondary aluminum processing unit (SAPU) on a daily basis. [40 CFR 63.1510(t)]

d. As an alternative to the procedures of 40 CFR 63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit (SAPU) is in compliance with the applicable emission limits for the emission unit. [40 CFR 63.1510(u)]

e. As required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR. [40 CFR 63.1517(a)]

i. The permittee 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. [40 CFR 63.1517(a)(1)]

ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and [40 CFR 63.1517(a)(2)]

iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software. [40 CFR 63.1517(a)(3)]

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

i. 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. [40 CFR 63.1517(b)(5)]

ii. For each continuous monitoring system, records required by 40 CFR 63.10(c). [40 CFR 63.1517(b)(6)]

iii. 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. [40 CFR 63.1517(b)(7)]

iv. Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan. [40 CFR 63.1517(b)(8)]

v. Records of all charge materials for group 1 melting/holding furnaces without air pollution control devices processing only clean charge. [40 CFR 63.1517(b)(9)]
vi. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [40 CFR 63.1517(b)(13)]

vii. Records for any approved alternative monitoring or test procedure. [40 CFR 63.1517(b)(15)]

viii. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]
1) OM&M plan; and [40 CFR 63.1517(b)(16)(ii)]
2) Site-specific secondary aluminum processing unit emission plan (if applicable). [40 CFR 63.1517(b)(16)(iii)]

ix. For each secondary aluminum processing unit, records of total charge weight, or if the permittee 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. [40 CFR 63.1517(b)(17)]

x. For any failure to meet an applicable standard, the permittee must maintain the following records; [40 CFR 63.1517(b)(18)]
1) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken. [40 CFR 63.1517(b)(18)(i)]
2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.1517(b)(18)(ii)]

xi. For each period of startup or shutdown for which the permittee chooses to demonstrate compliance for an affected source, the permittee must comply with 40 CFR 63.1517(b)(19)(i) or (ii). [40 CFR 63.1517(b)(19)]
1) To demonstrate compliance based on a feed/charge rate of zero, a flux rate of zero and the use of electricity, propane or natural gas as the sole sources of heating or the lack of heating, the permittee must submit a semiannual report in accordance with 40 CFR 63.1516(b)(2)(vii) or maintain the following records: [40 CFR 63.1517(b)(19)(i)]
   A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(i)(A)]
   B. The quantities of feed/charge and flux introduced during each startup and shutdown; and [40 CFR 63.1517(b)(19)(i)(B)]
   C. The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or [40 CFR 63.1517(b)(19)(i)(C)]
2) To demonstrate compliance based on performance tests, the permittee must maintain the following records: [40 CFR 63.1517(b)(19)(ii)]
   A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(ii)(A)]
   B. The measured emissions in lb/hr or µg/hr or ng/hr; [40 CFR 63.1517(b)(19)(ii)(B)]
   C. The measured feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and [40 CFR 63.1517(b)(19)(ii)(C)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. An explanation to support that such conditions are considered representative startup and shutdown operations. [40 CFR 63.1517(b)(19)(ii)(D)]

g. For SAPU requirements, refer to SECTION D(4).

h. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:

a. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the Division, unless and until the plan is revised in accordance with the following procedures: [40 CFR 63.1510(b)]

i. If the Division determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or 40 CFR 63, Subpart RRR, the permittee shall promptly make all necessary revisions and resubmit the revised plan.

ii. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the Division.

b. Site-specific requirements for secondary aluminum processing units. Within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the permittee shall include the following information: [40 CFR 63.1510(s)(1)]

i. The identification of each emission unit in the SAPU; [40 CFR 63.1510(s)(1)(i)]

ii. The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application; [40 CFR 63.1510(s)(1)(ii)]

iii. The emission limit calculated for each SAPU and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; [40 CFR 63.1510(s)(1)(iii)]

iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of 40 CFR Part 63 Subpart RRR; and [40 CFR 63.1510(s)(1)(iv)]

v. The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t). [40 CFR 63.1510(s)(1)(v)]

c. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: [40 CFR 63.1510(s)(2)]

i. Any averaging among emissions of differing pollutants; [40 CFR 63.1510(s)(2)(i)]

ii. The inclusion of any affected sources other than emission units in a secondary aluminum processing unit; [40 CFR 63.1510(s)(2)(ii)]

iii. The inclusion of any emission unit while it is shutdown; or [40 CFR 63.1510(s)(2)(iii)]

iv. The inclusion of any periods of startup or shutdown in emission calculations. [40 CFR 63.1510(s)(2)(iv)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee shall submit a request to the Division containing the information required by 40 CFR 63.1510(s)(1) and obtain approval of the Division prior to implementing any revisions. [40 CFR 63.1510(s)(3)]

e. If the permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in 40 CFR 63, Subpart RRR, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR 63.1510(j)(5) and 40 CFR 63.1510(v), the permittee may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in 40 CFR 63.1510(w)(1) through (6). [40 CFR 63.1510(w)]

f. As required by 40 CFR 63.9(e) and (f), the permittee must provide notification of the anticipated date for conducting performance tests and visible emission observations. The permittee 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(a)(6)]

g. Each permittee of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by 40 CFR 63.1501. Each permittee of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by 40 CFR 63.1511(b). The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in 40 CFR 63.1515(a)(1) through (10). A complete notification of compliance status report must include: [40 CFR 63.1512(r); 40 CFR 63.1515(b)]

i. All information required in 40 CFR 63.9(h). The permittee 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). [40 CFR 63.1515(b)(1)]

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). [40 CFR 63.1515(b)(2)]

iii. Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements. [40 CFR 63.1515(b)(3)]

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, total reactive fluorine flux injection rate for uncontrolled group 1 furnaces), including the operating cycle or time period used in the performance test. [40 CFR 63.1515(b)(4)]

v. The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device). [40 CFR 63.1515(b)(9)]
h. Excess emissions/summary report. The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63.1516(b)]

i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.1516(b)(1)]

1) An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter). [40 CFR 63.1516(b)(1)(iv)]

2) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1516(b)(1)(vi)]

3) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR 63.1516(b)(1)(vii)]

ii. Each report must include each of these certifications, as applicable: [40 CFR 63.1516(b)(2)]

1) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: “Each group 1 furnace without add-on air pollution control devices subject to emission limits in 40 CFR 63.1505(i)(2) processed only clean charge during this reporting period.” [40 CFR 63.1516(b)(2)(iv)]

2) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1): “During each startup and shutdown, no flux and no feed/charge were added to the emission unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated.” [40 CFR 63.1516(b)(2)(vii)]

iii. The permittee 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. [40 CFR 63.1516(b)(3)]

1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR 63, Subpart RRR, the permittee must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either 40 CFR 63.1516(b)(3)(i)(A) or (B). [40 CFR 63.1516(b)(3)(i)]

A. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html), the permittee must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the permittee
claims that some of the performance test information being submitted is confidential business information (CBI), the permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. [40 CFR 63.1516(b)(3)(i)(A)]

B. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the permittee must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.1516(b)(3)(i)(B)]

iv. A malfunction report that is required under 40 CFR 63.1516(d) shall be submitted simultaneously with the semiannual excess emissions/summary report required by 40 CFR 63.1516(b). [40 CFR 63.1516(b)(4)]

i. Annual compliance certifications. For the purpose of annual certifications of compliance, the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR 63.1516(c)]

i. Any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by 40 CFR 63, Subpart RRR; and [40 CFR 63.1516(c)(1)]

ii. All monitoring, recordkeeping, and reporting requirements were met during the year. [40 CFR 63.1516(c)(2)]

j. If there was a malfunction during the reporting period, the permittee must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1506(a)(5). [40 CFR 63.1516(d)]

k. All reports required by 40 CFR 63, Subpart RRR not subject to the requirements in 40 CFR 63.1516(b) must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR 63.1516(b) in paper format. [40 CFR 63.1516(e)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Refer to SECTION F for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group B – Group 1 Furnaces With Control

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity Maximum Burner Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 2: North Casthouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>W-2 Furnace Charge Well</td>
<td>9             78,840                      8  Lime Injected Baghouse</td>
</tr>
<tr>
<td>22</td>
<td>W-1 Melt Furnace</td>
<td>9             78,840                      20 Lime Injected Baghouse</td>
</tr>
<tr>
<td>134</td>
<td>W-3 Melt Furnace</td>
<td>15            82,000                      50.9 Lime Injected Baghouse</td>
</tr>
</tbody>
</table>

1Two sets of two 10 MMBtu/hr burners; only one set operates at a time.

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations
401 KAR 63:002, Section (2)(4)(ccc), 40 C.F.R. 63.1500 to 63.1519, Tables 1 to 3, and Appendix A (Subpart RRR), National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

PRECLUDED REGULATIONS:
401 KAR 51:017, Prevention of significant deterioration of air quality

NON-APPLICABLE REGULATIONS:
40 CFR 64, Compliance assurance monitoring (CAM). Does not apply because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

1. Operating Limitations:
   a. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1506(a)(5)]

   b. Labeling. The permittee must provide and maintain easily visible labels posted at each group 1 furnace that identifies the applicable emission limits and means of compliance, including: [40 CFR 63.1506(b)]
      i. The type of affected source or emission unit (e.g., group 1 furnace). [40 CFR 63.1506(b)(1)]
      ii. 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. [40 CFR 63.1506(b)(2)]

c. Capture/collection systems. For each affected source or emission unit equipped with an add-on air pollution control device, the permittee must: [40 CFR 63.1506(c)]
   i. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates or facial inlet velocities as contained in the ACGIH Guidelines (incorporated by reference, see 40 CFR 63.14); [40 CFR 63.1506(c)(1)]
   ii. 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 [40 CFR 63.1506(c)(2)]
   iii. Operate each capture/collection system according to the procedures and requirements in the OM&M plan. [40 CFR 63.1506(c)(3)]

d. Feed/charge weight. The permittee of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must: [40 CFR 63.1506(d)]
   i. Except as provided in 40 CFR 63.1506(d)(3), 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 [40 CFR 63.1506(d)(1)]
   ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan. [40 CFR 63.1506(d)(2)]
   iii. The permittee may choose 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: [40 CFR 63.1506(d)(3)]
      1) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and [40 CFR 63.1506(d)(3)(i)]
      2) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight. [40 CFR 63.1506(d)(3)(ii)]

e. Group 1 furnace with add-on air pollution control devices. The permittee of a group 1 furnace with emissions controlled by a lime-injected fabric filter must: [40 CFR 63.1506(m)]
   i. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the permittee must: [40 CFR 63.1506(m)(1)]
      1) Initiate corrective action within 1 hour of a bag leak detection system alarm. [40 CFR 63.1506(m)(1)(i)]
      2) Complete the corrective action procedures in accordance with the OM&M plan. [40 CFR 63.1506(m)(1)(ii)]
      3) 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
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action. [40 CFR 63.1506(m)(1)(iii)]

ii. If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, the permittee must: [40 CFR 63.1506(m)(2)]

1) Initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and [40 CFR 63.1506(m)(2)(i)]

2) Complete the corrective action procedures in accordance with the OM&M plan. [40 CFR 63.1506(m)(2)(ii)]

iii. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F). [40 CFR 63.1506(m)(3)]

iv. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at or above the level established during the performance test. [40 CFR 63.1506(m)(4)]

v. 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. [40 CFR 63.1506(m)(5)]

vi. Operate each sidewell furnace such that: [40 CFR 63.1506(m)(6)]

1) The level of molten metal remains above the top of the passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits. [40 CFR 63.1506(m)(6)(i)]

2) Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits. [40 CFR 63.1506(m)(6)(ii)]

vii. The operation of capture/collection systems and control devices associated with natural gas-fired, propane-fired or electrically heated group 1 furnaces that will be idled for at least 24 hours after the furnace cycle has been completed may be temporarily stopped. Operation of these capture/collection systems and control devices must be restarted before feed/charge, flux or alloying materials are added to the furnace. [40 CFR 63.1506(m)(7)]

f. Corrective action. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee 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. [40 CFR 63.1506(p)]
g. **Operation, maintenance, and monitoring (OM&M) plan.** The permittee must prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The permittee of an existing affected source must submit the OM&M plan to the Division no later than the compliance date established by 40 CFR 63.1501. The permittee of any new affected source must submit the OM&M plan to the Division within 90 days after a successful initial performance test under 40 CFR 63.1511(b). The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63, Subpart RRR. The permittee must comply with all of the provisions of the OM&M plan as submitted to the Division unless and until the plan is revised in accordance with the procedures in 6. **Specific Reporting Requirements (a).** Each plan must contain the following information: [40 CFR 63.1510(b)]

i. 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. [40 CFR 63.1510(b)(1)]

ii. A monitoring schedule for each affected source and emission unit. [40 CFR 63.1510(b)(2)]

iii. 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. [40 CFR 63.1510(b)(3)]

iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: [40 CFR 63.1510(b)(4)]

1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and [40 CFR 63.1510(b)(4)(i)]

2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, subpart A. [40 CFR 63.1510(b)(4)(ii)]

v. Procedures for monitoring process and control device parameters, including lime injection rates, 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. [40 CFR 63.1510(b)(5)]

vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including: [40 CFR 63.1510(b)(6)]

1) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and [40 CFR 63.1510(b)(6)(i)]

2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed. [40 CFR 63.1510(b)(6)(ii)]

vii. 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. [40 CFR 63.1510(b)(7)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

h. Prior to changing furnace classifications to those not already authorized in SECTION B, the permittee shall submit a permit application to incorporate the applicable standards from 40 CFR 63, Subpart RRR. [401 KAR 52:020, Section 7]

i. For SAPU requirements, refer to SECTION D(4).

j. The permittee shall limit aluminum throughput to EU 134 to less than 82,000 tons/yr, on a 12-month rolling basis. [To preclude 401 KAR 51:017]

k. The permittee shall limit usage of natural gas in EU 134 to less than 278.3 MMscf/yr, on a 12-month rolling basis. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:

2. Emission Limitations:
   a. For EU 20: The permittee shall not allow emissions of PM10 to exceed 10.22 tons/yr on a 12-month rolling basis. [To preclude 401 KAR 51:017]

      Compliance Demonstration Method:
      Refer to SECTION D(3) for calculations related to the ton per year limit.

   b. Opacity Standard: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

      Compliance Demonstration Method:
      Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

   c. Mass Emission Standard: The permittee shall not cause, suffer, allow or permit the emission into the open air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
      i. For process weights < 0.5 tons/hour: $E=2.34$
      ii. For process weights < 30 tons/hour: $E=3.59P^{0.62}$

      Where:
      E is the rate of the emission in lb/hour
      P is the process weight rate in tons/hour.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Results from the tests required by 3. Testing Requirements shall be converted into lb/hr and shall be compared to the allowable emission rate determined by 2. Emission Limitation (b).

d. The permittee has a choice to limit emissions from the furnaces on an individual basis or as part of a Secondary Aluminum Processing Unit (SAPU), included in the OM&M plan. On an individual basis, the permittee shall not allow the emissions from the furnaces to exceed the following: [40 CFR 63.1505(i), (k)]

i. 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge; [40 CFR 63.1505(i)(1)]

ii. 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge; [40 CFR 63.1505(i)(2)]

iii. 15 µg of D/F TEQ per Mg (2.1 × 10⁻⁴ gr of D/F TEQ per ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge; and [40 CFR 63.1505(i)(3)]

iv. 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, 10 percent of the uncontrolled HCl emissions, by weight. [40 CFR 63.1505(i)(4)]

v. The permittee must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option. [40 CFR 63.1505(i)(5)]

vi. The permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge. [40 CFR 63.1505(i)(6)]

vii. The permittee 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 comply with the emission limits of 40 CFR 63.1505(i)(1) through (4) on the basis of the combined emissions from the sidewell and the hearth. [40 CFR 63.1505(i)(7)]

Compliance Demonstration Method:
A. The permittee shall demonstrate compliance using the equations in 40 CFR 63.1513 and by meeting the requirements in 3. Testing Requirements, 4. Specific Monitoring Requirements, 5. Specific Recordkeeping Requirements, 6. Specific Reporting Requirements.

B. Periods of startup and shutdown. For a new or existing affected source, or a new or existing emission unit subject to an emissions limit in 40 CFR 63.1505(b) through (j) expressed in units of pounds per ton of feed/charge, or µg TEQ or ng TEQ per Mg of feed/charge, demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1) or determine the emissions per unit of feed/charge during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(2). Startup and shutdown emissions for group 1 furnaces and in-line fluxers must be calculated individually, and not on the basis of a SAPU. Periods of startup and shutdown are excluded from the calculation of SAPU emission limits in 40 CFR 63.1505(k), the SAPU monitoring requirements in 40
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

CFR 63.1510(t) and the SAPU emissions calculations in 40 CFR 63.1513(e). [40 CFR 63.1513(f)]

i. For periods of startup and shutdown, records establishing a feed/charge rate of zero, a flux rate of zero, and that the affected source or emission unit was either heated with electricity, propane or natural gas as the sole sources of heat or was not heated, may be used to demonstrate compliance with the emission limit, or [40 CFR 63.1513(f)(1)]

ii. For periods of startup and shutdown, divide the measured emissions in lb/hr or µg/hr or ng/hr by the feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data are available. [40 CFR 63.1513(f)(2)]

e. For SAPU requirements, refer to SECTION D(4).

f. The permittee shall not allow the emissions of PM$_{2.5}$ and NO$_x$ to exceed the following limits on a 12-month rolling basis: [To preclude 401 KAR 51:017]

i. For EU 134: 2.63 tons/yr for PM$_{2.5}$; and

ii. For EU 134: 22.58 tons/yr for NO$_x$

Compliance Demonstration Method:
Refer to SECTION D(3) for calculations related to the ton per year limits.

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

b. The permittee shall conduct stack testing for PM$_{10}$ on EU 20 once every 5 years using 40 CFR 51, Appendix M, Method 201A and 40 CFR 60, Appendix A, Method 5 (or an alternate method as approved by the Division). This testing shall be used to establish emission factors and demonstrate compliance with the PM$_{10}$ limit in 2. Emission Limitations.

c. Site-specific test plan. Prior to conducting any performance test required by 40 CFR 63, Subpart RRR, the permittee must prepare a site-specific test plan which satisfies all of the rule requirements, and must obtain approval of the plan pursuant to the procedures set forth in 40 CFR 63.7. Performance tests shall be conducted under such conditions as the Administrator specifies to the permittee based on representative performance of the affected source for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.1511(a)]

d. Initial performance test. 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 emission unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). Except for the date by which the performance test must be conducted, the permittee must
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c). [40 CFR 63.1511(b)]

i. The performance tests must be conducted under representative conditions expected to produce the highest level of HAP emissions expressed in the units of the emission standards for the HAP (considering the extent of feed/charge contamination, reactive flux addition rate and feed/charge rate). If a single test condition is not expected to produce the highest level of emissions for all HAP, testing under two or more sets of conditions (for example high contamination at low feed/charge rate, and low contamination at high feed/charge rate) may be required. Any subsequent performance tests for the purposes of establishing new or revised parametric limits shall be allowed upon pre-approval from the Division. These new parametric settings shall be used to demonstrate compliance for the period being tested. [40 CFR 63.1511(b)(1)]

ii. 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. [40 CFR 63.1511(b)(2)]

iii. Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle. Additionally, for batch processes where the length of the process operating cycle is not known in advance, and where isokinetic sampling must be conducted based on the procedures in Method 5 in appendix A to part 60, use the following procedure to ensure that sampling is conducted over the entire process operating cycle: [40 CFR 63.1511(b)(3)]

1) Choose a minimum operating cycle length and begin sampling assuming this minimum length will be the run time (e.g., if the process operating cycle is known to last from four to six hours, then assume a sampling time of four hours and divide the sampling time evenly between the required number of traverse points); [40 CFR 63.1511(b)(3)(i)]

2) After each traverse point has been sampled once, begin sampling each point again for the same time per point, in the reverse order, until the operating cycle is complete. All traverse points as required by Method 1 of appendix A to part 60, must be sampled at least once during each test run; [40 CFR 63.1511(b)(3)(ii)]

3) In order to distribute the sampling time most evenly over all the traverse points, do not perform all runs using the same sampling point order (e.g., if there are four ports and sampling for run 1 began in port 1, then sampling for run 2 could begin in port 4 and continue in reverse order.) [40 CFR 63.1511(b)(3)(iii)]

iv. Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter. [40 CFR 63.1511(b)(4)]

v. 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. [40 CFR 63.1511(b)(5)]

vi. Apply 40 CFR 63.1511(b)(1) through (5) for each pollutant separately if a different production rate, charge material or, if applicable, reactive fluxing rate would apply and
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

thereby result in a higher expected emissions rate for that pollutant. [40 CFR 63.1511(b)(6)]

vii. The permittee may not conduct performance tests during periods of malfunction. [40 CFR 63.1511(b)(7)]

e. Test methods. 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: [40 CFR 63.1511(c)]

i. Method 1 for sample and velocity traverses. [40 CFR 63.1511(c)(1)]

ii. Method 2 for velocity and volumetric flow rate. [40 CFR 63.1511(c)(2)]

iii. Method 3 for gas analysis. [40 CFR 63.1511(c)(3)]

iv. Method 4 for moisture content of the stack gas. [40 CFR 63.1511(c)(4)]

v. Method 5 for the concentration of PM. [40 CFR 63.1511(c)(5)]

vi. Method 9 for visible emission observations. [40 CFR 63.1511(c)(6)]

vii. Method 23 for the concentration of D/F. [40 CFR 63.1511(c)(7)]

viii. Method 26A for the concentration of HCl and HF. Method 26 may also be used, except at sources where entrained water droplets are present in the emission stream. 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. [40 CFR 63.1511(c)(9)]

f. Alternative methods. The permittee may use alternative test methods as provided in 40 CFR 63.1511(d)(1) through (3). [40 CFR 63.1511(d)]

i. In lieu of conducting the annual flow rate measurements using Methods 1 and 2, the permittee may use Method 204 in Appendix M to 40 CFR part 51 to conduct annual verification of a permanent total enclosure for the affected source/emission unit. [40 CFR 63.1511(d)(2)]

ii. The permittee may use an alternative test method approved by the Administrator. [40 CFR 63.1511(d)(3)]

g. Repeat tests. The permittee must conduct a performance test every 5 years following the initial performance test. [40 CFR 63.1511(e)]

h. Establishment of monitoring and operating parameter values. The permittee 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 permittee must use the appropriate procedures in 40 CFR 63.1511 and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The permittee 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 Division: [40 CFR 63.1511(g)]

i. The complete emission test report(s) used as the basis of the parameter(s) is submitted. [40 CFR 63.1511(g)(1)]

ii. The same test methods and procedures as required by 40 CFR 63, Subpart RRR were used in the test. [40 CFR 63.1511(g)(2)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. The permittee 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. [40 CFR 63.1511(g)(3)]

iv. All process and control equipment operating parameters required to be monitored were monitored as required in 40 CFR 63, Subpart RRR and documented in the test report. [40 CFR 63.1511(g)(4)]

v. If the permittee wants to conduct a new performance test and establish different operating parameter values, they must submit a revised site specific test plan and receive approval in accordance with 40 CFR 63.1511(a). In addition, if an permittee wants to use existing data in addition to the results of the new performance test to establish operating parameter values, they must meet the requirements in 40 CFR 63.1511(g)(1) through (4). [40 CFR 63.1511(g)(5)]

i. Testing of commonly-ducted units not within a secondary aluminum processing unit. With the prior approval of the Division, the permittee may do combined performance testing of two or more individual affected sources or emission units which are not included in a single existing SAPU or new SAPU, but whose emissions are manifolded to a single control device. Any such performance testing of commonly-ducted units must satisfy the following basic requirements: [40 CFR 63.1511(i)]

   i. All testing must be designed to verify that each affected source or emission unit individually satisfies all emission requirements applicable to that affected source or emission unit; [40 CFR 63.1511(i)(1)]

   ii. All emissions of pollutants subject to a standard must be tested at the outlet from each individual affected source or emission unit while operating under the highest load or capacity reasonably expected to occur, and prior to the point that the emissions are manifolded together with emissions from other affected sources or emission units; [40 CFR 63.1511(i)(2)]

   iii. The combined emissions from all affected sources and emission units which are manifolded to a single emission control device must be tested at the outlet of the emission control device; [40 CFR 63.1511(i)(3)]

   iv. All tests at the outlet of the emission control device must be conducted with all affected sources and emission units whose emissions are manifolded to the control device operating simultaneously under the highest load or capacity reasonably expected to occur; and [40 CFR 63.1511(i)(4)]

   v. For purposes of demonstrating compliance of a commonly-ducted unit with any emission limit for a particular type of pollutant, the emissions of that pollutant by the individual unit shall be presumed to be controlled by the same percentage as total emissions of that pollutant from all commonly-ducted units are controlled at the outlet of the emission control device. [40 CFR 63.1511(i)(5)]

j. The permittee 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). [40 CFR 63.1512(d)(1)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

k. The permittee of a group 1 furnace that processes only clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM 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). [40 CFR 63.1512(d)(2)]

l. The permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the permittee is not required to conduct an emission test for HCl. [40 CFR 63.1512(d)(3)]

m. The permittee 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 40 CFR 63.1512(d)(1) or (d)(2), to measure emissions from both the sidewell and the hearth. [40 CFR 63.1512(d)(4)]

n. Feed/charge weight measurement. During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the permittee 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 permittee that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight. [40 CFR 63.1512(k)]

o. Continuous opacity monitoring system. The permittee of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the permittee must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test. [40 CFR 63.1512(l)]

p. Inlet gas temperature. The permittee of 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. [40 CFR 63.1512(n)]
   i. 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; [40 CFR 63.1512(n)(1)]
   ii. Determine and record the 15-minute block average temperatures for the 3 test runs; and [40 CFR 63.1512(n)(2)]
   iii. Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs. [40 CFR 63.1512(n)(3)]
q. **Flux injection rate.** The permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate and, for uncontrolled furnaces, the total reactive fluorine flux injection rate. [40 CFR 63.1512(o)]
   i. 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; [40 CFR 63.1512(o)(1)]
   ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs; [40 CFR 63.1512(o)(2)]
   iii. 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 the following equation: [40 CFR 63.1512(o)(3)]
   \[ W_t = F_1 W_1 + F_2 W_2 \]
   Where:
   - \( W_t \) = Total chlorine usage, by weight;
   - \( F_1 \) = Fraction of gaseous or liquid flux that is chlorine;
   - \( W_1 \) = Weight of reactive flux gas injected;
   - \( F_2 \) = Fraction of solid reactive chloride flux that is chlorine (e.g., \( F = 0.75 \) for magnesium chloride); and
   - \( W_2 \) = Weight of solid reactive flux;
   iv. Divide the weight of total chlorine usage (\( W_t \)) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and [40 CFR 63.1512(o)(4)]
   v. If a solid reactive flux other than magnesium chloride is used, the permittee must derive the appropriate proportion factor subject to approval by the Division. [40 CFR 63.1512(o)(5)]

r. **Lime injection.** The permittee 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. [40 CFR 63.1512(p)]
   i. For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and [40 CFR 63.1512(p)(1)]
   ii. Record the feeder setting and lime injection rate for the 3 test runs. If the feed rate setting and lime injection rates vary between the runs, determine and record the average feed rate and lime injection rate from the 3 runs. [40 CFR 63.1512(p)(2)]

s. Use the following equation to determine compliance with an emission limit for PM or HCl: [40 CFR 63.1513(b)(1)]
   \[ E = \frac{C \times Q \times K_1}{P} \]
   Where:
   - \( E \) = Emission rate of PM, HCl, in lb/ton (kg/Mg) of feed;
   - \( C \) = Concentration of PM, HCl, in gr/dscf (g/dscm);
   - \( Q \) = Volumetric flow rate of exhaust gases, in dscf/hr (dscm/hr);
   - \( K_1 \) = Conversion factor, 1 lb/7,000 gr (1 kg/1,000 g); and
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

\[ P = \text{Production rate, in ton/hr (Mg/hr).} \]

t. Use the following equation to determine compliance with an emission limit for D/F: [40 CFR 63.1513(b)(2)]

\[ E = \frac{C \times Q}{P} \]

Where:
- \( E \) = Emission rate of D/F, in gr/ton (µg/Mg) of feed;
- \( C \) = Concentration of D/F, in gr/dscf (µg/dscm);
- \( Q \) = Volumetric flow rate of exhaust gases, in dscf/hr (dscm/hr); and
- \( P \) = Production rate, in ton/hr (Mg/hr).

u. To determine compliance with an HCl percent reduction standard: [40 CFR 63.1513(c)]

\[ \%R = \frac{L_i - L_o}{L_i} \times 100 \]

Where:
- \( \%R \) = Percent reduction of the control device;
- \( L_i \) = Inlet loading of pollutant, kg/Mg (lb/ton); and
- \( L_o \) = Outlet loading of pollutant, kg/Mg (lb/ton).

v. Conversion of D/F measurements to TEQ units. To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update, incorporated by reference see 40 CFR 63.14. [40 CFR 63.1513(d)]

w. For SAPU requirements, refer to SECTION D (5).

x. Within 60 days after achieving the maximum production rate at which the EU 134 will be operated but not later than 180 days after initial startup, the permittee shall complete performance testing for PM\(_{2.5}\) emissions using U.S. EPA Method 5 and 202 or an equivalent method approved by the Division and for NO\(_x\) emissions using U.S. EPA Method 7E or an equivalent method approved by the Division at the baghouse stack. This test shall be repeated once every 5 years. [To preclude 401 KAR 51:017]

4. Specific Monitoring Requirements:

a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
   i. Monthly hours of operation;
   ii. Process weight in tons of each batch;
   iii. Monthly number of batches; and

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

c. Labeling. The permittee must inspect the labels for each group 1 furnace 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. [40 CFR 63.1510(c)]

d. Capture/collection system. The permittee must: [40 CFR 63.1510(d)]
   i. 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 [40 CFR 63.1510(d)(1)]
   ii. 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. [40 CFR 63.1510(d)(2)]
   iii. Meet the requirements in SECTION E.

e. Feed/charge weight. The permittee of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/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 permittee may use a procedure acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR 63.1510(e)]
   i. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The permittee may apply to the Division for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard. [40 CFR 63.1510(e)(1)]
   ii. The permittee 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. [40 CFR 63.1510(e)(2)]

f. Fabric filters and lime-injected fabric filters. The permittee of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR must install, calibrate, maintain, and continuously operate a bag leak detection system as required in 40 CFR 63.1510(f)(1) of or a continuous opacity monitoring system as required in 40 CFR 63.1510(f)(2). [40 CFR 63.1510(f)]
   i. These requirements apply to the permittee of a new or existing affected source or existing emission unit using a bag leak detection system. [40 CFR 63.1510(f)(1)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1) The permittee must install and operate a bag leak detection system for each exhaust stack of a fabric filter. [40 CFR 63.1510(f)(1)(i)]

2) Each bag leak detection system must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions. [40 CFR 63.1510(f)(1)(ii)]

3) 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. [40 CFR 63.1510(f)(1)(iii)]

4) The bag leak detection system sensor must provide output of relative or absolute PM loadings. [40 CFR 63.1510(f)(1)(iv)]

5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. [40 CFR 63.1510(f)(1)(v)]

6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel. [40 CFR 63.1510(f)(1)(vi)]

7) 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. [40 CFR 63.1510(f)(1)(vii)]

8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. [40 CFR 63.1510(f)(1)(viii)]

9) 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. [40 CFR 63.1510(f)(1)(ix)]

10) Following initial adjustment of the system, the permittee 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. [40 CFR 63.1510(f)(1)(x)]

ii. These requirements apply to the permittee of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system. [40 CFR 63.1510(f)(2)]

1) The permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack. [40 CFR 63.1510(f)(2)(i)]

2) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60. [40 CFR 63.1510(f)(2)(ii)]

g. Fabric filter inlet temperature. These requirements apply to the permittee of a group 1 furnace using a lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1510(h)]

i. The permittee 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 40 CFR 63, subpart A. [40 CFR 63.1510(h)(1)]

ii. The temperature monitoring device must meet each of these performance and equipment specifications: [40 CFR 63.1510(h)(2)]

1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period. [40 CFR 63.1510(h)(2)(i)]

2) 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). [40 CFR 63.1510(h)(2)(ii)]

3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator. [40 CFR 63.1510(h)(2)(iii)]

h. Lime injection. These requirements apply to the permittee of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1510(i)]

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

1) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the permittee must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or [40 CFR 63.1510(i)(1)(i)]

2) Subject to the approval of the Division, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the permittee must promptly initiate and complete corrective action, or [40 CFR 63.1510(i)(1)(ii)]

3) Subject to the approval of the Division, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the permittee must promptly initiate and complete corrective action. [40 CFR 63.1510(i)(1)(iii)]

ii. The permittee of a continuous lime injection system must record the lime feeder setting once each day of operation. [40 CFR 63.1510(i)(2)]

iii. The permittee who intermittently adds lime to a lime-injected fabric filter must obtain approval from the Division for a lime addition monitoring procedure. The Division will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis. [40 CFR 63.1510(i)(3)]

iv. At least once per month, verify that the lime injection rate in pounds per hour (lb/hr) is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. If the monthly check of the lime injection rate is below the 90 percent, the permittee must repair or adjust the lime injection system to
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restore normal operation within 45 days. The permittee may request from the Division an extension of up to an additional 45 days to demonstrate that the lime injection rate is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. In the event that a lime feeder is repaired or replaced, the feeder must be calibrated, and the feed rate must be restored to the lb/hr feed rate operating limit established during the most recent performance test within 45 days. The permittee may request from the Division an extension of up to an additional 45 days to complete the repair or replacement and establishing a new setting. The repair or replacement, and the establishment of the new feeder setting(s) must be documented in accordance with the recordkeeping requirements of 40 CFR 63.1517. [40 CFR 63.1510(i)(4)]

i. Total reactive flux injection rate. The permittee must: [40 CFR 63.1510(j)]
   i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit. [40 CFR 63.1510(j)(1)]
      1) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. [40 CFR 63.1510(j)(1)(i)]
      2) The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Division for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards. [40 CFR 63.1510(j)(1)(ii)]
      3) The permittee 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. [40 CFR 63.1510(j)(1)(iii)]
   ii. 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). [40 CFR 63.1510(j)(2)]
   iii. 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: [40 CFR 63.1510(j)(3)]
      1) Gaseous or liquid reactive flux other than chlorine; and [40 CFR 63.1510(j)(3)(i)]
      2) Solid reactive flux. [40 CFR 63.1510(j)(3)(ii)]
   iv. 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). For solid flux that is added intermittently, record the amount added for each operating cycle or time period used in the performance test using the procedures in 40 CFR 63.1512(o). [40 CFR 63.1510(j)(4)]
   v. The permittee 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
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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. [40 CFR 63.1510(j)(5)]

j. Sidewell group 1 furnace with add-on air pollution control devices. These requirements apply to the permittee of a sidewell group 1 furnace using add-on air pollution control devices. The permittee must: [40 CFR 63.1510(n)(1)]
   i. Record in an operating log for each tap of a sidewell furnace whether 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. If visual inspection of the molten metal level is not possible, the molten metal level must be determined using physical measurement methods [40 CFR 63.1510(n)(1)]

k. For SAPU requirements, refer to SECTION D(4).

l. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
      ii. Process weight in tons for each batch;
      iii. Monthly number of batches; and

   b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

   c. Except as provided in 40 CFR 63.1510(u), the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) for each secondary aluminum processing unit (SAPU) on a daily basis. [40 CFR 63.1510(t)]

   d. As an alternative to the procedures of 40 CFR 63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit (SAPU) is in compliance with the applicable emission limits for the emission unit. [40 CFR 63.1510(u)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. As required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR. [40 CFR 63.1517(a)]
   i. The permittee 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. [40 CFR 63.1517(a)(1)]
   ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and [40 CFR 63.1517(a)(2)]
   iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software. [40 CFR 63.1517(a)(3)]

f. In addition to the general records required by 40 CFR 63.10(b), the permittee of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of: [40 CFR 63.1517(b)]
   i. For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter: [40 CFR 63.1517(b)(1)]
      1) If a bag leak detection system is used, 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. [40 CFR 63.1517(b)(1)(i)]
      2) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 CFR 63.1517(b)(1)(ii)]
   ii. For each group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken. [40 CFR 63.1517(b)(3)]
   iii. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter: [40 CFR 63.1517(b)(4)]
      1) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; [40 CFR 63.1517(b)(4)(i)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2) If lime feeder setting is monitored, records of daily and monthly inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. If a lime feeder has been repaired or replaced, this action must be documented along with records of the new feeder calibration and the feed mechanism set points necessary to maintain the lb/hr feed rate operating limit. These records must be maintained on site and available upon request. [40 CFR 63.1517(b)(4)(ii)]

3) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge). [40 CFR 63.1517(b)(4)(iii)]

iv. For each continuous monitoring system, records required by 40 CFR 63.10(c). [40 CFR 63.1517(b)(6)]

v. 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. [40 CFR 63.1517(b)(7)]

vi. 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. [40 CFR 63.1517(b)(10)]

vii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [40 CFR 63.1517(b)(13)]

viii. Records of annual inspections of emission capture/collection and closed vent systems or, if the alternative to the annual flow rate measurements is used, records of differential pressure; fan RPM or fan motor amperage; static pressure measurements; or duct centerline velocity using a hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple, as appropriate. [40 CFR 63.1517(b)(14)]

ix. Records for any approved alternative monitoring or test procedure. [40 CFR 63.1517(b)(15)]

tax. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]

1) OM&M plan; and [40 CFR 63.1517(b)(16)(ii)]

2) Site-specific secondary aluminum processing unit emission plan (if applicable). [40 CFR 63.1517(b)(16)(iii)]

xi. For each secondary aluminum processing unit, records of total charge weight, or if the permittee 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. [40 CFR 63.1517(b)(17)]

tax. For any failure to meet an applicable standard, the permittee must maintain the following records; [40 CFR 63.1517(b)(18)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken. [40 CFR 63.1517(b)(18)(i)]

2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.1517(b)(18)(ii)]

xiii. For each period of startup or shutdown for which the permittee chooses to demonstrate compliance for an affected source, the permittee must comply with 40 CFR 63.1517(b)(19)(i) or (ii). [40 CFR 63.1517(b)(19)]

1) To demonstrate compliance based on a feed/charge rate of zero, a flux rate of zero and the use of electricity, propane or natural gas as the sole sources of heating or the lack of heating, the permittee must submit a semiannual report in accordance with 40 CFR 63.1516(b)(2)(vii) or maintain the following records: [40 CFR 63.1517(b)(19)(i)]
   A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(i)(A)]
   B. The quantities of feed/charge and flux introduced during each startup and shutdown; and [40 CFR 63.1517(b)(19)(i)(B)]
   C. The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or [40 CFR 63.1517(b)(19)(i)(C)]

2) To demonstrate compliance based on performance tests, the permittee must maintain the following records: [40 CFR 63.1517(b)(19)(ii)]
   A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(ii)(A)]
   B. The measured emissions in lb/hr or µg/hr or ng/hr; [40 CFR 63.1517(b)(19)(ii)(B)]
   C. The measured feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and [40 CFR 63.1517(b)(19)(ii)(C)]
   D. An explanation to support that such conditions are considered representative startup and shutdown operations. [40 CFR 63.1517(b)(19)(ii)(D)]

For SAPU requirements, refer to SECTION D(4).

Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
   a. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the Division, unless and until the plan is revised in accordance with the following procedures: [40 CFR 63.1510(b)]
      i. If the Division determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or 40 CFR 63, Subpart RRR, the permittee shall promptly make all necessary revisions and resubmit the revised plan.
ii. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the Division.

b. Sidewell group 1 furnace with add-on air pollution control devices. These requirements apply to the permittee of a sidewell group 1 furnace using add-on air pollution control devices. The permittee must: [40 CFR 63.1510(n)]
   i. Submit a certification of compliance with the operational standards in 40 CFR 63.1506(m)(6) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(iii). [40 CFR 63.1510(n)(2)]

   c. Site-specific requirements for secondary aluminum processing units. Within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the permittee shall include the following information: [40 CFR 63.1510(s)(1)]
      i. The identification of each emission unit in the SAPU; [40 CFR 63.1510(s)(1)(i)]
      ii. The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application; [40 CFR 63.1510(s)(1)(ii)]
      iii. The emission limit calculated for each SAPU and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; [40 CFR 63.1510(s)(1)(iii)]
      iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of 40 CFR Part 63 Subpart RRR; and [40 CFR 63.1510(s)(1)(iv)]
      v. The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t). [40 CFR 63.1510(s)(1)(v)]

d. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: [40 CFR 63.1510(s)(2)]
   i. Any averaging among emissions of differing pollutants; [40 CFR 63.1510(s)(2)(i)]
   ii. The inclusion of any affected sources other than emission units in a secondary aluminum processing unit; [40 CFR 63.1510(s)(2)(ii)]
   iii. The inclusion of any emission unit while it is shutdown; or [40 CFR 63.1510(s)(2)(iii)]
   iv. The inclusion of any periods of startup or shutdown in emission calculations. [40 CFR 63.1510(s)(2)(iv)]

e. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee shall submit a request to the Division containing the information required by 40 CFR 63.1510(s)(1) and obtain approval of the Division prior to implementing any revisions. [40 CFR 63.1510(s)(3)]

f. If the permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in 40 CFR 63, Subpart RRR, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR 63.1510(j)(5) and 40 CFR 63.1510(v), the permittee may submit an application to the Administrator. Any such
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application will be processed according to the criteria and procedures set forth in 40 CFR 63.1510(w)(1) through (6). [40 CFR 63.1510(w)]

g. As required by 40 CFR 63.9(e) and (f), the permittee must provide notification of the anticipated date for conducting performance tests and visible emission observations. The permittee 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(a)(6)]

h. The permittee of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by 40 CFR 63.1501. The permittee of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by 40 CFR 63.1511(b). The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in 40 CFR 63.1515(a)(1) through (10). A complete notification of compliance status report must include: [40 CFR 63.1512(q); 40 CFR 63.1512(r); 40 CFR 63.1512(s); 40 CFR 63.1515(b)]

i. All information required in 40 CFR 63.9(h). The permittee 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). [40 CFR 63.1515(b)(1)]

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). [40 CFR 63.1515(b)(2)]

iii. Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements. [40 CFR 63.1515(b)(3)]

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, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. [40 CFR 63.1515(b)(4)]

v. Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c). [40 CFR 63.1515(b)(5)]

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). [40 CFR 63.1515(b)(6)]

vii. The OM&M plan. [40 CFR 63.1515(b)(9)]

i. Excess emissions/summary report. The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no
deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63.1516(b)]

i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.1516(b)(1)]
   1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour. [40 CFR 63.1516(b)(1)(i)]
   2) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour. [40 CFR 63.1516(b)(1)(ii)]
   3) 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, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter). [40 CFR 63.1516(b)(1)(iv)]
   4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1516(b)(1)(vi)]
   5) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR 63.1516(b)(1)(vii)]

ii. Each report must include each of these certifications, as applicable: [40 CFR 63.1516(b)(2)]
   1) For each sidewell group 1 furnace with add-on air pollution control devices: “Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.” [40 CFR 63.1516(b)(2)(iii)]
   2) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1): “During each startup and shutdown, no flux and no feed/charge were added to the emission unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated.” [40 CFR 63.1516(b)(2)(vii)]

iii. The permittee 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. [40 CFR 63.1516(b)(3)]
   1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR 63, Subpart RRR, the permittee must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either 40 CFR 63.1516(b)(3)(i)(A) or (B). [40 CFR 63.1516(b)(3)(i)]
   A. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html), the permittee must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT
or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. [40 CFR 63.1516(b)(3)(i)(A)]

B. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the permittee must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.1516(b)(3)(i)(B)]

iv. A malfunction report that is required under 40 CFR 63.1516(d) shall be submitted simultaneously with the semiannual excess emissions/summary report required by 40 CFR 63.1516(b). [40 CFR 63.1516(b)(4)]

j. Annual compliance certifications. For the purpose of annual certifications of compliance the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR 63.1516(c)]

i. Any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by 40 CFR 63, Subpart RRR; and [40 CFR 63.1516(c)(1)]

ii. All monitoring, recordkeeping, and reporting requirements were met during the year. [40 CFR 63.1516(c)(2)]

k. If there was a malfunction during the reporting period, the permittee must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by a permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1506(a)(5). [40 CFR 63.1516(d)]

l. All reports required by 40 CFR 63, Subpart RRR not subject to the requirements in 40 CFR 63.1516(b) must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee of a source, these reports
may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR 63.1516(b) in paper format. [40 CFR 63.1516(e)]

m. Refer to SECTION F for general reporting requirements.

7. **Specific Control Equipment Operating Conditions:**
   a. The baghouses associated with the emission units listed above shall be properly maintained, used in conjunction with operation of the associated emission units, and operated consistent with the manufacturer’s specifications. [401 KAR 52:020, Section 10]

   b. The permittee shall maintain a daily log of the pressure drop across each baghouse and ensure it remains in the proper operating range as specified by the manufacturer and as required by the OM&M plan. [401 KAR 52:020, Section 10]

   c. Refer to SECTION E.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group C – Dross Handling

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
<td></td>
</tr>
<tr>
<td>Area 1: South Casthouse:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>Dross Loadout</td>
<td>7.18</td>
<td>29,300</td>
<td>Baghouse</td>
</tr>
<tr>
<td>99</td>
<td>Dross Cooling Pad</td>
<td>4</td>
<td>12,500</td>
<td>Baghouse</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations

PRECLUDED REGULATIONS:
401 KAR 51:017, Prevention of significant deterioration of air quality

NON-APPLICABLE REGULATIONS:
40 CFR 64, Compliance assurance monitoring (CAM). Does not apply because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

1. Operating Limitations:
The dross loadout facility entrance and exit doors shall be closed during loading operations and all other times when practical. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:
The permittee shall incorporate the requirements, above, into written standard operating procedures and certify annually that the requirements have been complied with. Also refer to 5. Specific Recordkeeping Requirements (d).

2. Emission Limitations:
a. For EU 99: The permittee shall not allow emissions of PM$_{10}$ to exceed the following limits on a rolling 12-month basis: [To preclude 401 KAR 51:017]
   i. Hourly emissions shall not exceed 5.14 lb/hr
   ii. Yearly emissions shall not exceed 4.19 tons/yr

Compliance Demonstration Method:
Refer to 3. Testing Requirements, 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements. Refer to SECTION D(3) for calculations related to the ton per year limit.

b. Opacity Standard: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

c. **Mass Emission Standard:** The permittee shall not cause, suffer, allow or permit the emission into the open air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
   i. For process weights < 0.5 tons/hour: \( E = 2.34 \)
   ii. For process weights < 30 tons/hour: \( E = 3.59P^{0.62} \)

Where:
- \( E \) is the rate of the emission in lb/hour
- \( P \) is the process weight rate in tons/hour

Compliance Demonstration Method:
A. For EU 99, the permittee is assumed to be in compliance when complying with 2. Emission Limitations (a).
B. For EU AB, the permittee is assumed to be in compliance when the baghouse is properly operated and maintained.
C. Refer to 1. Operating Limitations and 7. Specific Control Equipment Operating Conditions.

3. **Testing Requirements:**
   a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

   b. The permittee shall conduct stack testing for PM\(_{10}\) on EU 99, while EU AB is not operating, once every 5 years using 40 CFR 51, Appendix M, Method 201A and 40 CFR 60, Appendix A, Method 5 (or an alternate method as approved by the Division). This testing shall be used to establish emission factors and demonstrate compliance with the PM\(_{10}\) limit in 2. Emission Limitations.

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Monthly and 12-Month rolling process weigh rate (tons).

   b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The permittee shall monitor, daily, the pressure drop across the baghouse. [401 KAR 52:020, Section 10]

d. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Monthly and 12-Month rolling process weigh rate (tons).

   b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

   c. The permittee shall maintain daily records to verify that 1. Operating Limitations and 7. Specific Control Equipment Operating Conditions were complied with. These records shall include, but not be limited to, records of the time and duration of maintenance on the baghouse associated with EU 99 and certification that 7. Specific Control Equipment Operating Conditions (b)(ii) was complied with for the duration of each maintenance event. [401 KAR 52:020, Section 10]

   d. The permittee shall maintain records, daily, of the pressure drop across the baghouse. [401 KAR 52:020, Section 10]

   e. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
   a. When EU99 and AB are operating, with the exception of the compliance method specified in 7. Specific Control Equipment Operating Conditions (b)(ii), the permittee shall report any pressure drop more than 0.5 inches of water outside of the range recommended by the manufacturer for the pulse cleaning set points to the Division as specified in Section F(8).

   b. Refer to SECTION F for general reporting requirements.

7. Specific Control Equipment Operating Conditions:
   a. The permittee shall operate the baghouse associated with EU AB at all times when the unit is operating. [To preclude 401 KAR 51:017]

   b. The permittee shall operate the baghouse associated with EU 99 according to the following requirements: [To preclude 401 KAR 51:017]
      i. The baghouse shall be operated at all times except during periods of baghouse maintenance.
ii. When the baghouse is offline for maintenance, the permittee shall suspend all other activities associated with EU 99 – Dross Cooling Pad and all exterior doors of the Dross Cooling Pad Room shall be kept closed.

c. The permittee shall operate and maintain the baghouse according to the manufacturer’s instructions. [401 KAR 52:020, Section 10]

d. The permittee shall maintain the pressure drop across the baghouse within 0.5 inches of water of the range recommended by the manufacturer for the pulse cleaning set points with the exception of the compliance method specified in the 7. Specific Control Equipment Operating Conditions (b)(ii). [401 KAR 52:020, Section 10]

e. Refer to SECTION E.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group D – Group 2 Furnaces

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 2: North Casthouse</td>
<td>W-6 Melt Furnace</td>
<td>6.4</td>
<td>22</td>
<td>10/1/1982</td>
</tr>
</tbody>
</table>

**APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations
401 KAR 63:002, Section (2)(4)(ccc), 40 C.F.R. 63.1500 to 63.1519, Tables 1 to 3, and Appendix A (Subpart RRR), National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

1. Operating Limitations:
   a. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1506(a)(5)]
   
   b. Labeling. The permittee must provide and maintain easily visible labels posted at each group 2 furnace that identifies the applicable emission limits and means of compliance, including: [40 CFR 63.1506(b)]
      i. The type of affected source or emission unit (e.g., group 2 furnace). [40 CFR 63.1506(b)(1)]
      ii. 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, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan. [40 CFR 63.1506(b)(2)]
   
   c. Group 2 furnace. The permittee of a new or existing group 2 furnace must: [40 CFR 63.1506(o)]
      i. Operate each furnace using only clean charge as the feedstock. [40 CFR 63.1506(o)(1)]
      ii. Operate each furnace using no reactive flux. [40 CFR 63.1506(o)(2)]
   
   d. Corrective action. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee 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
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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. [40 CFR 63.1506(p)]

e. Operation, maintenance, and monitoring (OM&M) plan. The permittee must prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The permittee of an existing affected source must submit the OM&M plan to the Division no later than the compliance date established by 40 CFR 63.1501. The permittee of any new affected source must submit the OM&M plan to the Division within 90 days after the compliance date established by 40 CFR 63.1501. The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63, Subpart RRR. The permittee must comply with all of the provisions of the OM&M plan as submitted to the Division unless and until the plan is revised in accordance with the procedures in 6. Specific Reporting Requirements (a). Each plan must contain the following information: [40 CFR 63.1510(b)]

i. 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. [40 CFR 63.1510(b)(1)]

ii. A monitoring schedule for each affected source and emission unit. [40 CFR 63.1510(b)(2)]

iii. 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. [40 CFR 63.1510(b)(3)]

iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: [40 CFR 63.1510(b)(4)]

1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and [40 CFR 63.1510(b)(4)(i)]

2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, subpart A of this part. [40 CFR 63.1510(b)(4)(ii)]

v. Procedures for monitoring process and control device parameters, including lime injection rates, 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. [40 CFR 63.1510(b)(5)]

vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including: [40 CFR 63.1510(b)(6)]

1) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and [40 CFR 63.1510(b)(6)(i)]

2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed. [40 CFR 63.1510(b)(6)(ii)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

vii. 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. [40 CFR 63.1510(b)(7)]

f. Prior to changing furnace classifications to those not already authorized in SECTION B, the permittee shall submit a permit application to incorporate the applicable standards from 40 CFR 63, Subpart RRR. [401 KAR 52:020, Section 7]

Compliance Demonstration Method:

2. Emission Limitations:
a. Opacity Standard: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:
Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

b. Mass Emission Standard: The permittee shall not cause, suffer, allow or permit the emission into the open air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
   i. For process weights < 0.5 tons/hour: $E = 2.34$
   ii. For process weights < 30 tons/hour: $E = 3.59P^{0.62}$

Where:
   E is the rate of the emission in lb/hour
   P is the process weight rate in tons/hour

Compliance Demonstration Method:
Compliance with the mass emission standard is assumed based on the potential to emit for EU 12.

3. Testing Requirements:
Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
   i. Monthly hours of operation;
   ii. Process weight in tons of each batch;
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. Monthly number of batches; and

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

c. Labeling. The permittee must inspect the labels for each group 2 furnace 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. [40 CFR 63.1510(c)]

d. Group 2 furnace. These requirements apply to the permittee of a new or existing group 2 furnace. The permittee must: [40 CFR 63.1510(r)]
i. Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents. [40 CFR 63.1510(r)(1)]
ii. Submit a certification of compliance with the applicable operational standard for charge materials in 40 CFR 63.1506(o) for each 6-month reporting period. Each certification must contain the information in 40 CFR 63.1516(b)(2)(v). [40 CFR 63.1510(r)(2)]

e. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the following for each emission unit: [401 KAR Section 52:020, Section 10]
i. Monthly hours of operation;
ii. Process weight in tons for each batch;
iii. Monthly number of batches; and

b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

c. As required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR. [40 CFR 63.1517(a)]
i. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. [40 CFR 63.1517(a)(1)]

ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and [40 CFR 63.1517(a)(2)]

iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software. [40 CFR 63.1517(a)(3)]

d. In addition to the general records required by 40 CFR 63.10(b), the permittee of a new or existing affected source must maintain records of: [40 CFR 63.1517(b)]

i. For each continuous monitoring system, records required by 40 CFR 63.10(c). [40 CFR 63.1517(b)(6)]

ii. Records of all charge materials and fluxing materials or agents for a group 2 furnace. [40 CFR 63.1517(b)(12)]

iii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [40 CFR 63.1517(b)(13)]

iv. Records for any approved alternative monitoring or test procedure. [40 CFR 63.1517(b)(15)]

v. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]

1) OM&M plan. [40 CFR 63.1517(b)(16)(ii)]

vi. For any failure to meet an applicable standard, the permittee must maintain the following records; [40 CFR 63.1517(b)(18)]

1) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken. [40 CFR 63.1517(b)(18)(i)]

2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.1517(b)(18)(ii)]

e. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:

a. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the Division, unless and until the plan is revised in accordance with the following procedures: [40 CFR 63.1510(b)]

i. If the Division determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or 40 CFR 63, Subpart RRR, the permittee shall promptly make all necessary revisions and resubmit the revised plan.

ii. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the Division.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Each permittee of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by 40 CFR 63.1501. Each permittee of a new affected source must submit a notification of compliance status report within 90 days after the compliance date established by 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 40 CFR 63.1515(a)(1) through (10). A complete notification of compliance status report must include: [40 CFR 63.1512(r); 40 CFR 63.1515(b)]

i. All information required in 40 CFR 63.9(h). The permittee 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). [40 CFR 63.1515(b)(1)]

ii. Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements [40 CFR 63.1515(b)(3)]

iii. 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, total reactive fluorine flux injection rate for uncontrolled group 1 furnaces, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. [40 CFR 63.1515(b)(4)]

iv. The OM&M plan. [40 CFR 63.1515(b)(9)]

c. Excess emissions/summary report. The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63.1516(b)]

i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.1516(b)(1)]

1) 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). [40 CFR 63.1516(b)(1)(iv)]

2) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1516(b)(1)(vi)]

ii. Each report must include the following certification, as applicable: For each group 2 furnace: “Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.” [40 CFR 63.1516(b)(2)(v)]
iii. A malfunction report that is required under 40 CFR 63.1516(d) shall be submitted simultaneously with the semiannual excess emissions/summary report required by 40 CFR 63.1516(b). [40 CFR 63.1516(b)(4)]

d. *Annual compliance certifications.* For the purpose of annual certifications of compliance, the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR 63.1516(c)]

i. Any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by 40 CFR 63, Subpart RRR; and [40 CFR 63.1516(c)(1)]

ii. All monitoring, recordkeeping, and reporting requirements were met during the year. [40 CFR 63.1516(c)(2)]

e. If there was a malfunction during the reporting period, the permittee must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1506(a)(5). [40 CFR 63.1516(d)]

f. All reports required by 40 CFR 63, Subpart RRR not subject to the requirements in 40 CFR 63.1516(b) must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR 63.1516(b) in paper format. [40 CFR 63.1516(e)]

g. Refer to **SECTION F** for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group E – In-Line Fluxers

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
<td></td>
</tr>
<tr>
<td>Area 2: North Casthouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>NCH Degassing/Fluxing Units</td>
<td>41</td>
<td>359,160</td>
<td>Lime Injected Baghouse</td>
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<tr>
<td>Area 1: South Casthouse</td>
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<tr>
<td>129A/B</td>
<td>SCH Degassing/Fluxing Unit #1A/B</td>
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<td>122,640</td>
<td>None</td>
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<tr>
<td>130A/B</td>
<td>SCH Degassing/Fluxing Unit #2A/B</td>
<td>14</td>
<td>122,640</td>
<td>None</td>
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<td>131A/B</td>
<td>SCH Degassing/Fluxing Unit #3A/B</td>
<td>14</td>
<td>122,640</td>
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<td>132</td>
<td>SCH Degassing/Fluxing Unit #4</td>
<td>14</td>
<td>122,640</td>
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<td>133</td>
<td>SCH Degassing/Fluxing Unit #5</td>
<td>14</td>
<td>122,640</td>
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APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations
401 KAR 63:002, Section (2)(4)(ccc), 40 C.F.R. 63.1500 to 63.1519, Tables 1 to 3, and Appendix A (Subpart RRR), National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

PRECLUDED REGULATIONS:
401 KAR 51:017, Prevention of significant deterioration of air quality, for EU 23

NON-APPLICABLE REGULATIONS:
40 CFR 64, Compliance assurance monitoring (CAM). Does not apply to EU 23 because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

1. Operating Limitations:
   a. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1506(a)(5)]

   b. Labeling. The permittee must provide and maintain easily visible labels posted at each in-line fluxer that identifies the applicable emission limits and means of compliance, including: [40 CFR 63.1506(b)]
      i. The type of affected source or emission unit (e.g., in-line fluxer). [40 CFR 63.1506(b)(1)]
SECTON B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. 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. [40 CFR 63.1506(b)(2)]

c. Capture/collection systems. For each affected source or emission unit equipped with an add-on air pollution control device, the permittee must: [40 CFR 63.1506(c)]
   i. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates or facial inlet velocities as contained in the ACGIH Guidelines (incorporated by reference, see 40 CFR 63.14); [40 CFR 63.1506(c)(1)]
   ii. 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 [40 CFR 63.1506(c)(2)]
   iii. Operate each capture/collection system according to the procedures and requirements in the OM&M plan. [40 CFR 63.1506(c)(3)]

d. Feed/charge weight. The permittee of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must: [40 CFR 63.1506(d)]
   i. Except as provided in 40 CFR 63.1506(d)(3), 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 [40 CFR 63.1506(d)(1)]
   ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan. [40 CFR 63.1506(d)(2)]
   iii. The permittee 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: [40 CFR 63.1506(d)(3)]
      1) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and [40 CFR 63.1506(d)(3)(i)]
      2) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight. [40 CFR 63.1506(d)(3)(ii)]

e. In-line fluxer. The permittee of an in-line fluxer with emissions controlled by a lime-injected fabric filter must: [40 CFR 63.1506(k)]
   i. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, [40 CFR 63.1506(k)(1)]
      1) 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. [40 CFR 63.1506(k)(1)(i)]
      2) 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
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action. [40 CFR 63.1506(k)(1)(ii)]

ii. 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. [40 CFR 63.1506(k)(2)]

iii. For a continuous injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at or above the level established during the performance test. [40 CFR 63.1506(k)(3)]

iv. 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. [40 CFR 63.1506(k)(4)]

f. Corrective action. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee 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. [40 CFR 63.1506(p)]

g. Operation, maintenance, and monitoring (OM&M) plan. The permittee must prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The permittee of an existing affected source must submit the OM&M plan to the Division no later than the compliance date established by 40 CFR 63.1501. The permittee of any new affected source must submit the OM&M plan to the Division within 90 days after a successful initial performance test under 40 CFR 63.1511(b). The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of 40 CFR 63.1510 and is otherwise consistent with the requirements of 40 CFR 63, Subpart RRR. The permittee must comply with all of the provisions of the OM&M plan as submitted to the Division unless and until the plan is revised in accordance with the procedures in 6. Specific Reporting Requirements (a). Each plan must contain the following information: [40 CFR 63.1510(b)]

i. 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. [40 CFR 63.1510(b)(1)]

ii. A monitoring schedule for each affected source and emission unit. [40 CFR 63.1510(b)(2)]
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iii. 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. [40 CFR 63.1510(b)(3)]

iv. Procedures for the proper operation and maintenance of monitoring devices or systems
used to determine compliance, including: [40 CFR 63.1510(b)(4)]
1) Calibration and certification of accuracy of each monitoring device, at least once
every 6 months, according to the manufacturer's instructions; and [40 CFR 63.1510(b)(4)(i)]
2) Procedures for the quality control and quality assurance of continuous emission or
opacity monitoring systems as required by the general provisions in 40 CFR 63,
subpart A. [40 CFR 63.1510(b)(4)(ii)]

v. Procedures for monitoring process and control device parameters, including lime
injection rates, 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. [40 CFR 63.1510(b)(5)]

vi. Corrective actions to be taken when process or operating parameters or add-on control
device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1),
including: [40 CFR 63.1510(b)(6)]
1) Procedures to determine and record the cause of any deviation or excursion, and
the time the deviation or excursion began and ended; and [40 CFR 63.1510(b)(6)(i)]
2) Procedures for recording the corrective action taken, the time corrective action was
initiated, and the time/date corrective action was completed. [40 CFR 63.1510(b)(6)(ii)]

vii. 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. [40 CFR 63.1510(b)(7)]

h. For SAPU requirements, refer to SECTION D(4).

Compliance Demonstration Method:
Refer to 3. Testing Requirements, 4. Specific Monitoring Requirements, 5. Specific
Recordkeeping Requirements, 6. Specific Reporting Requirements, and 7. Specific
Control Equipment Operating Conditions.

2. Emission Limitations:
   a. **Opacity Standard:** The permittee shall not cause, suffer, allow or permit any continuous
      emission into the open air from a control device or stack associated with any affected
      facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010,
      Section 3(1)(a)]

      Compliance Demonstration Method:
      Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping
      Requirements (b).

   b. **Mass Emission Standard:** The permittee shall not cause, suffer, allow or permit the
      emission into the open air from a control device or stack associated with any affected
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]

i. For process weights < 0.5 tons/hour: \[ E=2.34 \]

ii. For process weights < 30 tons/hour: \[ E=3.59P^{0.62} \]

iii. For process weights ≥ 30 tons/hour: \[ E=17.31P^{0.16} \]

Where:
\[ E \] is the rate of the emission in lb/hour
\[ P \] is the process weight rate in tons/hour.

Compliance Demonstration Method:
Compliance with the mass emission standard is assumed based on the potential to emit for EU 23.

c. In-line fluxer. Except as provided in 40 CFR 63.1505(j)(3) for an in-line fluxer using no reactive flux material, the permittee of an in-line fluxer has a choice to limit emissions from the in-line fluxer on an individual basis or as part of a Secondary Aluminum Processing Unit (SAPU), included in the OM&M plan. On an individual basis, the permittee shall not allow the emissions from the in-line fluxer to exceed the following: [40 CFR 63.1505(j), (k)]

i. 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge; [40 CFR 63.1505(j)(1)]

ii. 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge. [40 CFR 63.1505(j)(2)]

iii. The emission limits in 40 CFR 63.1505(j)(1) and (j)(2) do not apply to an in-line fluxer that uses no reactive flux materials. [40 CFR 63.1505(j)(3)]

iv. The permittee must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device used to control emissions from the in-line fluxer, if a COM is chosen as the monitoring option. [40 CFR 63.1505(j)(4)]

v. The permittee may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge. [40 CFR 63.1505(j)(5)]

Compliance Demonstration Method:
A. The permittee shall demonstrate compliance using the equations in 40 CFR 63.1513 and by meeting the requirements in 3. Testing Requirements, 4. Specific Monitoring Requirements, 5. Specific Recordkeeping Requirements, 6. Specific Reporting Requirements.

B. Periods of startup and shutdown. For a new or existing affected source, or a new or existing emission unit subject to an emissions limit in 40 CFR 63.1505(b) through (j) expressed in units of pounds per ton of feed/charge, or µg TEQ or ng TEQ per Mg of feed/charge, demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1) or determine the emissions per unit of feed/charge during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(2). Startup and shutdown emissions for group 1 furnaces and in-line fluxers must be calculated individually, and not on the basis of a SAPU. Periods of startup and shutdown are excluded from the calculation of SAPU emission limits in 40 CFR 63.1505(k), the SAPU monitoring requirements in 40 CFR 63.1510(t) and the SAPU emissions calculations in 40 CFR 63.1513(e). [40 CFR 63.1513(f)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. For periods of startup and shutdown, records establishing a feed/charge rate of zero, a flux rate of zero, and that the affected source or emission unit was either heated with electricity, propane or natural gas as the sole sources of heat or was not heated, may be used to demonstrate compliance with the emission limit, or [40 CFR 63.1513(f)(1)]

ii. For periods of startup and shutdown, divide the measured emissions in lb/hr or µg/hr or ng/hr by the feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data are available. [40 CFR 63.1513(f)(2)]

d. For SAPU requirements, refer to SECTION D(4).

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

b. Site-specific test plan. Prior to conducting any performance test required by 40 CFR 63, Subpart RRR, the permittee must prepare a site-specific test plan which satisfies all of the rule requirements, and must obtain approval of the plan pursuant to the procedures set forth in 40 CFR 63.7. Performance tests shall be conducted under such conditions as the Administrator specifies to the permittee based on representative performance of the affected source for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.1511(a)]

c. Initial performance test. 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 emission unit, and report the results in the notification of compliance status report as described in 40 CFR 63.1515(b). Except for the date by which the performance test must be conducted, the permittee must conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c). [40 CFR 63.1511(b)]

i. The performance tests must be conducted under representative conditions expected to produce the highest level of HAP emissions expressed in the units of the emission standards for the HAP (considering the extent of feed/charge contamination, reactive flux addition rate and feed/charge rate). If a single test condition is not expected to produce the highest level of emissions for all HAP, testing under two or more sets of conditions (for example high contamination at low feed/charge rate, and low contamination at high feed/charge rate) may be required. Any subsequent performance tests for the purposes of establishing new or revised parametric limits shall be allowed upon pre-approval from the Division. These new parametric settings shall be used to demonstrate compliance for the period being tested. [40 CFR 63.1511(b)(1)]

ii. 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. [40 CFR 63.1511(b)(2)]
iii. Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter. [40 CFR 63.1511(b)(4)]

iv. 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. [40 CFR 63.1511(b)(5)]

v. Apply 40 CFR 63.1511(b)(1) through (5) for each pollutant separately if a different production rate, charge material or, if applicable, reactive fluxing rate would apply and thereby result in a higher expected emissions rate for that pollutant. [40 CFR 63.1511(b)(6)]

vi. The permittee may not conduct performance tests during periods of malfunction. [40 CFR 63.1511(b)(7)]

d. Test methods. 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: [40 CFR 63.1511(c)]

i. Method 1 for sample and velocity traverses. [40 CFR 63.1511(c)(1)]

ii. Method 2 for velocity and volumetric flow rate. [40 CFR 63.1511(c)(2)]

iii. Method 3 for gas analysis. [40 CFR 63.1511(c)(3)]

iv. Method 4 for moisture content of the stack gas. [40 CFR 63.1511(c)(4)]

v. Method 5 for the concentration of PM. [40 CFR 63.1511(c)(5)]

vi. Method 9 for visible emission observations. [40 CFR 63.1511(c)(6)]

vii. Method 26A for the concentration of HCl. Method 26 may also be used, except at sources where entrained water droplets are present in the emission stream. 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. [40 CFR 63.1511(c)(9)]

e. Alternative methods. The permittee may use alternative test methods as provided in 40 CFR 63.1511(d)(1) through (3). [40 CFR 63.1511(d)]

i. In lieu of conducting the annual flow rate measurements using Methods 1 and 2, the permittee may use Method 204 in Appendix M to 40 CFR part 51 to conduct annual verification of a permanent total enclosure for the affected source/emission unit. [40 CFR 63.1511(d)(2)]

ii. The permittee may use an alternative test method approved by the Administrator. [40 CFR 63.1511(d)(3)]

f. Repeat tests. The permittee must conduct a performance test every 5 years following the initial performance test. [40 CFR 63.1511(e)]

g. Testing of representative emission units. With the prior approval of the Division, the permittee may utilize emission rates obtained by testing an in-line flux box that does not have an add-on air pollution control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to
be representative of other units if all of the following criteria are satisfied: [40 CFR 63.1511(f)]

i. The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents; [40 CFR 63.1511(f)(1)]

ii. The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents; [40 CFR 63.1511(f)(2)]

iii. The tested emission unit must be operated utilizing the same work practices as the emission units that it represents; [40 CFR 63.1511(f)(3)]

iv. The tested emission unit must be of the same design as the emission units that it represents; and [40 CFR 63.1511(f)(4)]

v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents. [40 CFR 63.1511(f)(5)]

vi. All 3 separate runs of a performance test must be conducted on the same emission unit. [40 CFR 63.1511(f)(6)]

h. Establishment of monitoring and operating parameter values. The permittee 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 permittee must use the appropriate procedures in 40 CFR 63.1511 and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The permittee 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 Division: [40 CFR 63.1511(g)]

i. The complete emission test report(s) used as the basis of the parameter(s) is submitted. [40 CFR 63.1511(g)(1)]

ii. The same test methods and procedures as required by 40 CFR 63, Subpart RRR were used in the test. [40 CFR 63.1511(g)(2)]

iii. The permittee 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. [40 CFR 63.1511(g)(3)]

iv. All process and control equipment operating parameters required to be monitored were monitored as required in 40 CFR 63, Subpart RRR and documented in the test report. [40 CFR 63.1511(g)(4)]

v. If the permittee wants to conduct a new performance test and establish different operating parameter values, they must submit a revised site specific test plan and receive approval in accordance with 40 CFR 63.1511(a). In addition, if an permittee wants to use existing data in addition to the results of the new performance test to establish operating parameter values, they must meet the requirements in 40 CFR 63.1511(g)(1) through (4). [40 CFR 63.1511(g)(5)]

i. Testing of commonly-ducted units not within a secondary aluminum processing unit. With the prior approval of the Division, the permittee may do combined performance testing of two or more individual affected sources or emission units which are not included in a single
existing SAPU or new SAPU, but whose emissions are manifolded to a single control
device. Any such performance testing of commonly-ducted units must satisfy the following
basic requirements: [40 CFR 63.1511(i)]

i. All testing must be designed to verify that each affected source or emission unit
individually satisfies all emission requirements applicable to that affected source or
emission unit; [40 CFR 63.1511(i)(1)]

ii. All emissions of pollutants subject to a standard must be tested at the outlet from each
individual affected source or emission unit while operating under the highest load or
capacity reasonably expected to occur, and prior to the point that the emissions are
manifolded together with emissions from other affected sources or emission units; [40
CFR 63.1511(i)(2)]

iii. The combined emissions from all affected sources and emission units which are
manifolded to a single emission control device must be tested at the outlet of the
emission control device; [40 CFR 63.1511(i)(3)]

iv. All tests at the outlet of the emission control device must be conducted with all affected
sources and emission units whose emissions are manifolded to the control device
operating simultaneously under the highest load or capacity reasonably expected to
occur; and [40 CFR 63.1511(i)(4)]

v. For purposes of demonstrating compliance of a commonly-ducted unit with any
emission limit for a particular type of pollutant, the emissions of that pollutant by the
individual unit shall be presumed to be controlled by the same percentage as total
emissions of that pollutant from all commonly-ducted units are controlled at the outlet
of the emission control device. [40 CFR 63.1511(i)(5)]

j. The permittee of an in-line fluxer that uses reactive flux materials must conduct a
performance test to measure emissions of HCl and PM or otherwise demonstrate
compliance in accordance with 40 CFR 63.1512(h)(2). If the in-line fluxer is equipped with
an add-on control device, the emissions must be measured at the outlet of the control
device. [40 CFR 63.1512(h)(1)]

k. The permittee may choose to limit the rate at which reactive flux is added to an in-line
fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission
limit, that all chlorine in the reactive flux added to the in-line fluxer is emitted as HCl.
Under these circumstances, the permittee is not required to conduct an emission test for
HCl. [40 CFR 63.1512(h)(2)]

l. Feed/charge weight measurement. During the emission test(s) conducted to determine
compliance with emission limits in a kg/Mg (lb/ton) format, the permittee 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. The permittee that chooses to demonstrate compliance on the basis
of the aluminum production weight must measure the weight of aluminum produced by the
emission unit or affected source instead of the feed/charge weight. [40 CFR 63.1512(k)]
m. Continuous opacity monitoring system. The permittee of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the permittee must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test. [40 CFR 63.1512(l)]

n. Flux injection rate. The permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate. [40 CFR 63.1512(o)]

i. 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; [40 CFR 63.1512(o)(1)]

ii. Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs; [40 CFR 63.1512(o)(2)]

iii. 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 the following equation: [40 CFR 63.1512(o)(3)]

\[ W_t = F_1 W_1 + F_2 W_2 \]

Where:
- \( W_t \) = Total chlorine usage, by weight;
- \( F_1 \) = Fraction of gaseous or liquid flux that is chlorine;
- \( W_1 \) = Weight of reactive flux gas injected;
- \( F_2 \) = Fraction of solid reactive chloride flux that is chlorine (e.g., \( F = 0.75 \) for magnesium chloride); and
- \( W_2 \) = Weight of solid reactive flux;

iv. Divide the weight of total chlorine usage (\( W_t \)) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and [40 CFR 63.1512(o)(4)]

v. If a solid reactive flux other than magnesium chloride is used, the permittee must derive the appropriate proportion factor subject to approval by the Division. [40 CFR 63.1512(o)(5)]

o. Lime injection. The permittee 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. [40 CFR 63.1512(p)]

i. For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and [40 CFR 63.1512(p)(1)]

ii. Record the feeder setting and lime injection rate for the 3 test runs. If the feed rate setting and lime injection rates vary between the runs, determine and record the average feed rate and lime injection rate from the 3 runs. [40 CFR 63.1512(p)(2)]
Use the following equation to determine compliance with an emission limit for PM or HCl:

\[ E = \frac{C \times Q \times K_1}{P} \]

Where:
- \( E \) = Emission rate of PM, HCl, in lb/ton (kg/Mg) of feed;
- \( C \) = Concentration of PM, HCl, in gr/dscf (g/dscm);
- \( Q \) = Volumetric flow rate of exhaust gases, in dscf/hr (dscm/hr);
- \( K_1 \) = Conversion factor, 1 lb/7,000 gr (1 kg/1,000 g); and
- \( P \) = Production rate, in ton/hr (Mg/hr).

For SAPU requirements, refer to SECTION D(4).

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Process weight in tons.

   b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

   c. **Labeling.** The permittee must inspect the labels for each in-line fluxer 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. [40 CFR 63.1510(c)]

   d. **Capture/collection system.** The permittee must: [40 CFR 63.1510(d)]
      i. 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 [40 CFR 63.1510(d)(1)]
      ii. 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. [40 CFR 63.1510(d)(2)]
      iii. Meet the requirements in SECTION E.

   e. **Feed/charge weight.** The permittee of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/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 permittee may use a procedure acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR 63.1510(e)]

i. The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The permittee may apply to the Division for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standard. [40 CFR 63.1510(e)(1)]

ii. The permittee 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. [40 CFR 63.1510(e)(2)]

f. Fabric filters and lime-injected fabric filters. The permittee of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR must install, calibrate, maintain, and continuously operate a bag leak detection system as required in 40 CFR 63.1510(f)(1) or a continuous opacity monitoring system as required in 40 CFR 63.1510(f)(2). [40 CFR 63.1510(f)]

i. These requirements apply to the permittee of a new or existing affected source or existing emission unit using a bag leak detection system. [40 CFR 63.1510(f)(1)]

1) The permittee must install and operate a bag leak detection system for each exhaust stack of a fabric filter. [40 CFR 63.1510(f)(1)(i)]

2) Each bag leak detection system must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions. [40 CFR 63.1510(f)(1)(ii)]

3) 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. [40 CFR 63.1510(f)(1)(iii)]

4) The bag leak detection system sensor must provide output of relative or absolute PM loadings. [40 CFR 63.1510(f)(1)(iv)]

5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. [40 CFR 63.1510(f)(1)(v)]

6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel. [40 CFR 63.1510(f)(1)(vi)]

7) 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. [40 CFR 63.1510(f)(1)(vii)]

8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. [40 CFR 63.1510(f)(1)(viii)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

9) 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. [40 CFR 63.1510(f)(1)(ix)]

10) Following initial adjustment of the system, the permittee 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. [40 CFR 63.1510(f)(1)(x)]

ii. These requirements apply to the permittee of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system. [40 CFR 63.1510(f)(2)]

1) The permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack. [40 CFR 63.1510(f)(2)(i)]

2) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60. [40 CFR 63.1510(f)(2)(ii)]

g. Lime injection. These requirements apply to the permittee of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1510(i)]

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

1) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the permittee must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or [40 CFR 63.1510(i)(1)(i)]

2) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the permittee must promptly initiate and complete corrective action, or [40 CFR 63.1510(i)(1)(ii)]

3) Subject to the approval of the Division, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the permittee must promptly initiate and complete corrective action. [40 CFR 63.1510(i)(1)(iii)]

ii. The permittee of a continuous lime injection system must record the lime feeder setting once each day of operation. [40 CFR 63.1510(i)(2)]

iii. The permittee who intermittently adds lime to a lime-injected fabric filter must obtain approval from the Division for a lime addition monitoring procedure. The Division will not approve a monitoring procedure unless data and information are submitted
establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis. [40 CFR 63.1510(i)(3)]

iv. At least once per month, verify that the lime injection rate in pounds per hour (lb/hr) is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. If the monthly check of the lime injection rate is below the 90 percent, the permittee must repair or adjust the lime injection system to restore normal operation within 45 days. The permittee may request from the Division an extension of up to an additional 45 days to demonstrate that the lime injection rate is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. In the event that a lime feeder is repaired or replaced, the feeder must be calibrated, and the feed rate must be restored to the lb/hr feed rate operating limit established during the most recent performance test within 45 days. The permittee may request from the Division an extension of up to an additional 45 days to complete the repair or replacement and establishing a new setting. The repair or replacement, and the establishment of the new feeder setting(s) must be documented in accordance with the recordkeeping requirements of 40 CFR 63.1517. [40 CFR 63.1510(i)(4)]

h. Total reactive flux injection rate. The permittee must: [40 CFR 63.1510(j)]

i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit. [40 CFR 63.1510(j)(1)]

ii. 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). [40 CFR 63.1510(j)(2)]

iii. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
   1) Gaseous or liquid reactive flux other than chlorine; and [40 CFR 63.1510(j)(3)(i)]
   2) Solid reactive flux. [40 CFR 63.1510(j)(3)(ii)]

iv. 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). For solid flux that is added intermittently, record the amount added for each operating cycle or time period used in the performance test using the procedures in 40 CFR 63.1512(o). [40 CFR 63.1510(j)(4)]

v. The permittee 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. [40 CFR 63.1510(j)(5)]

i. In-line fluxers using no reactive flux. The permittee of an in-line fluxer that uses no reactive flux materials must submit a certification of compliance with the operational standard for
no reactive flux materials in 40 CFR 63.1506(l) for each 6-month reporting period. Each
certification must contain the information in 40 CFR 63.1516(b)(2)(vi). [40 CFR
63.1510(m)]

j. For SAPU requirements, refer to SECTION D(4).

k. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR
      52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Process weight in tons.
   b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
   c. Except as provided in 40 CFR 63.1510(u), the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) for each secondary aluminum processing unit (SAPU) on a daily basis. [40 CFR 63.1510(t)]
   d. As an alternative to the procedures of 40 CFR 63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit (SAPU) is in compliance with the applicable emission limits for the emission unit. [40 CFR 63.1510(u)]
   e. As required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR. [40 CFR 63.1517(a)]
      i. The permittee 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. [40 CFR 63.1517(a)(1)]
      ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and [40 CFR 63.1517(a)(2)]
      iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software. [40 CFR 63.1517(a)(3)]
   f. In addition to the general records required by 40 CFR 63.10(b), the permittee of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of: [40 CFR 63.1517(b)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter: [40 CFR 63.1517(b)(1)]

1) If a bag leak detection system is used, 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. [40 CFR 63.1517(b)(1)(i)]

2) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 CFR 63.1517(b)(1)(ii)]

ii. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter: [40 CFR 63.1517(b)(4)]

1) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; [40 CFR 63.1517(b)(4)(i)]

2) If lime feeder setting is monitored, records of daily and monthly inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. If a lime feeder has been repaired or replaced, this action must be documented along with records of the new feeder calibration and the feed mechanism set points necessary to maintain the lb/hr feed rate operating limit. These records must be maintained on site and available upon request. [40 CFR 63.1517(b)(4)(ii)]

3) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge). [40 CFR 63.1517(b)(4)(iii)]

iii. For each 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. [40 CFR 63.1517(b)(5)]

iv. For each continuous monitoring system, records required by 40 CFR 63.10(c). [40 CFR 63.1517(b)(6)]

v. 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. [40 CFR 63.1517(b)(7)]
vi. For each in-line fluxer for which the permittee has certified that no reactive flux was used: [40 CFR 63.1517(b)(11)]
   1) Operating logs which establish that no source of reactive flux was present at the in-line fluxer; [40 CFR 63.1517(b)(11)(i)]
   2) Labels required pursuant to 40 CFR 63.1506(b) which establish that no reactive flux may be used at the in-line fluxer; or [40 CFR 63.1517(b)(11)(ii)]
   3) Operating logs which document each flux gas, agent, or material used during each operating cycle. [40 CFR 63.1517(b)(11)(iii)]

vii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [40 CFR 63.1517(b)(13)]

viii. Records of annual inspections of emission capture/collection and closed vent systems or, if the alternative to the annual flow rate measurements is used, records of differential pressure; fan RPM or fan motor amperage; static pressure measurements; or duct centerline velocity using a hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple, as appropriate. [40 CFR 63.1517(b)(14)]

ix. Records for any approved alternative monitoring or test procedure. [40 CFR 63.1517(b)(15)]

x. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR 63.1517(b)(16)]
   1) OM&M plan; and [40 CFR 63.1517(b)(16)(ii)]
   2) Site-specific secondary aluminum processing unit emission plan (if applicable). [40 CFR 63.1517(b)(16)(iii)]

xi. For each secondary aluminum processing unit, records of total charge weight, or if the permittee 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. [40 CFR 63.1517(b)(17)]

xii. For any failure to meet an applicable standard, the permittee must maintain the following records; [40 CFR 63.1517(b)(18)]
   1) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken. [40 CFR 63.1517(b)(18)(i)]
   2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.1517(b)(18)(ii)]

xiii. For each period of startup or shutdown for which the permittee chooses to demonstrate compliance for an affected source, the permittee must comply with 40 CFR 63.1517(b)(19)(i) or (ii). [40 CFR 63.1517(b)(19)]
   1) To demonstrate compliance based on a feed/charge rate of zero, a flux rate of zero and the use of electricity, propane or natural gas as the sole sources of heating or the lack of heating, the permittee must submit a semiannual report in accordance with 40 CFR 63.1516(b)(2)(vii) or maintain the following records: [40 CFR 63.1517(b)(19)(i)]
      A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(i)(A)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. The quantities of feed/charge and flux introduced during each startup and shutdown; and [40 CFR 63.1517(b)(19)(i)(B)]

C. The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or [40 CFR 63.1517(b)(19)(i)(C)]

2) To demonstrate compliance based on performance tests, the permittee must maintain the following records: [40 CFR 63.1517(b)(19)(ii)]

A. The date and time of each startup and shutdown; [40 CFR 63.1517(b)(19)(ii)(A)]

B. The measured emissions in lb/hr or µg/hr or ng/hr; [40 CFR 63.1517(b)(19)(ii)(B)]

C. The measured feed/charge rate in tons/hr or Mg/hr from the most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and [40 CFR 63.1517(b)(19)(ii)(C)]

D. An explanation to support that such conditions are considered representative startup and shutdown operations. [40 CFR 63.1517(b)(19)(ii)(D)]

g. For SAPU requirements, refer to SECTION D(4).

h. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:

a. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the Division, unless and until the plan is revised in accordance with the following procedures: [40 CFR 63.1510(b)]

i. If the Division determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR 63.1510(b) or 40 CFR 63, Subpart RRR, the permittee shall promptly make all necessary revisions and resubmit the revised plan.

ii. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the Division.

b. Site-specific requirements for secondary aluminum processing units. Within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the permittee shall include the following information: [40 CFR 63.1510(s)(1)]

i. The identification of each emission unit in the SAPU; [40 CFR 63.1510(s)(1)(i)]

ii. The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application; [40 CFR 63.1510(s)(1)(ii)]

iii. The emission limit calculated for each SAPU and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; [40 CFR 63.1510(s)(1)(iii)]

iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of 40 CFR Part 63 Subpart RRR; and [40 CFR 63.1510(s)(1)(iv)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

v. The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t). [40 CFR 63.1510(s)(1)(v)]

c. The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: [40 CFR 63.1510(s)(2)]
   i. Any averaging among emissions of differing pollutants; [40 CFR 63.1510(s)(2)(i)]
   ii. The inclusion of any affected sources other than emission units in a secondary aluminum processing unit; [40 CFR 63.1510(s)(2)(ii)]
   iii. The inclusion of any emission unit while it is shutdown; or [40 CFR 63.1510(s)(2)(iii)]
   iv. The inclusion of any periods of startup or shutdown in emission calculations. [40 CFR 63.1510(s)(2)(iv)]

d. To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee shall submit a request to the Division containing the information required by 40 CFR 63.1510(s)(1) and obtain approval of the Division prior to implementing any revisions. [40 CFR 63.1510(s)(3)]

e. If the permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in 40 CFR 63, Subpart RRR, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR 63.1510(j)(5) and 40 CFR 63.1510(v), the permittee may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in 40 CFR 63.1510(w)(1) through (6). [40 CFR 63.1510(w)]

f. As required by 40 CFR 63.9(e) and (f), the permittee must provide notification of the anticipated date for conducting performance tests and visible emission observations. The permittee 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(a)(6)]

g. The permittee of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by 40 CFR 63.1501. The permittee of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by 40 CFR 63.1511(b). The notification shall be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in 40 CFR 63.1515(a)(1) through (10). A complete notification of compliance status report must include: [40 CFR 63.1512(q), 40 CFR 63.1512(r), 40 CFR 63.1512(s), 40 CFR 63.1515(b)]
   i. All information required in 40 CFR 63.9(h). The permittee 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). [40 CFR 63.1515(b)(1)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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). [40 CFR 63.1515(b)(2)]

iii. Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements. [40 CFR 63.1515(b)(3)]

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, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. [40 CFR 63.1515(b)(4)]

v. Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c). [40 CFR 63.1515(b)(5)]

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). [40 CFR 63.1515(b)(6)]

vii. The OM&M plan. [40 CFR 63.1515(b)(9)]

Excess emissions/summary report. The permittee must submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the permittee must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR 63.10(e)(3)(v). When no deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63.1516(b)]

i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.1516(b)(1)]

1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour. [40 CFR 63.1516(b)(1)(i)]

2) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour. [40 CFR 63.1516(b)(1)(ii)]

3) 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). [40 CFR 63.1516(b)(1)(iv)]

4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR. [40 CFR 63.1516(b)(1)(vi)]

5) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR 63.1516(b)(1)(vii)]

ii. Each report must include each of these certifications, as applicable: [40 CFR 63.1516(b)(2)]

1) For each in-line fluxer using no reactive flux: “Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period.” [40 CFR 63.1516(b)(2)(vi)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with 40 CFR 63.1513(f)(1): “During each startup and shutdown, no flux and no feed/charge were added to the emission unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated.” [40 CFR 63.1516(b)(2)(vii)]

iii. The permittee 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. [40 CFR 63.1516(b)(3)]

1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR 63, Subpart RRR, the permittee must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either 40 CFR 63.1516(b)(3)(i)(A) or (B). [40 CFR 63.1516(b)(3)(i)]

A. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site ([https://www3.epa.gov/ttn/chief/ert/ert_info.html](https://www3.epa.gov/ttn/chief/ert/ert_info.html)), the permittee must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) ([https://cdx.epa.gov/](https://cdx.epa.gov/)).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. [40 CFR 63.1516(b)(3)(i)(A)]

B. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the permittee must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.1516(b)(3)(i)(B)]

iv. A malfunction report that is required under 40 CFR 63.1516(d) shall be submitted simultaneously with the semiannual excess emissions/summary report required by 40 CFR 63.1516(b). [40 CFR 63.1516(b)(4)]

i. Annual compliance certifications. For the purpose of annual certifications of compliance, the permittee must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR 63.1516(c)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Any period of excess emissions, as defined in 40 CFR 63.1516(b)(1), that occurred during the year were reported as required by 40 CFR 63, Subpart RRR; and [40 CFR 63.1516(c)(1)]

ii. All monitoring, recordkeeping, and reporting requirements were met during the year. [40 CFR 63.1516(c)(2)]

j. If there was a malfunction during the reporting period, the permittee must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by a permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1506(a)(5). [40 CFR 63.1516(d)]

k. All reports required by 40 CFR 63, Subpart RRR not subject to the requirements in 40 CFR 63.1516(b) must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee of a source, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR 63.1516(b) in paper format. [40 CFR 63.1516(e)]

l. Refer to SECTION F for general reporting requirements.

7. **Specific Control Equipment Operating Conditions:**
   
a. The baghouse associated with the emission unit listed above shall be properly maintained, used in conjunction with operation of the associated emission units, and operated consistent with the manufacturer’s specifications. [To preclude 401 KAR 51:017]

b. The permittee shall maintain a daily log of the pressure drop across each baghouse and ensure it remains in the proper operating range as specified by the manufacturer and as required by the OM&M plan. [401 KAR 52:020, Section 10]

c. Refer to SECTION E.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group F – Hot Rolling Mill Units

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
<td></td>
</tr>
<tr>
<td>Area 1: South Casthouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area 3: Hot Rolling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>576 3-Stand Hot Aluminum Rolling Mill</td>
<td>112</td>
<td>981,120</td>
<td>Progressive Purification System (PPS-HE)</td>
</tr>
<tr>
<td>97</td>
<td>573 Reversing Mill</td>
<td>118</td>
<td>1,033,680</td>
<td>Rotoclone Low Efficiency Centrifugal Collector</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations

PRECLUDED REGULATION:
401 KAR 51:017, Prevention of significant deterioration of air quality

NON-APPLICABLE REGULATIONS:
40 CFR 64, Compliance assurance monitoring (CAM). Does not apply because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

1. Operating Requirements:
   a. The permittee shall restrict the throughputs for all units such that the emission limitations specified in 2. Emission Limitations are not exceeded.

   b. The permittee shall operate the PPS-HE system at all times EU 96 is operating. [To preclude 401 KAR 51:017]

2. Emission Limitations:
   a. Opacity Standard: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

b. Mass Emission Standard: The permittee shall not cause, suffer, allow or permit the emission into the on air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
   i. For process weights < 0.5 tons/hour:  \( E = 2.34 \)
   ii. For process weights < 30 tons/hour:  \( E = 3.59P^{0.62} \)
   iii. For process weights \( \geq 30 \) tons/hour:  \( E = 17.31P^{0.16} \)

Where:
   E is the rate of the emission in lb/hour
   P is the process weight rate in tons/hour.

Compliance Demonstration Method:
A. For EU 30A, the permittee is assumed to be in compliance based on the potential to emit for the unit.
B. For EU 30, 96, and 97, refer to 1. Operating Limitations, 3. Testing Requirements, and 7. Specific Control Equipment Operating Conditions.

c. The permittee shall not exceed the emission limitations specified in the following table, on a rolling 12-month basis: [To preclude 401 KAR 51:017]

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Unit Name</th>
<th>Pollutant</th>
<th>Emission Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>576 3-Stand Hot Aluminum Rolling Mill</td>
<td>PM(_{10})</td>
<td>51.44 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM(_{2.5})</td>
<td>50.35 tpy</td>
</tr>
</tbody>
</table>

Compliance Demonstration Method:
Refer to 3. Testing Requirements, 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements. Refer to SECTION D(3) for calculations related to the ton per year limits.

3. Testing Requirements:
a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

b. The permittee shall conduct stack testing for PM, PM\(_{10}\), PM\(_{2.5}\), and VOC on EU 96 no later than December 31, 2026 and every 5 years thereafter using 40 CFR 51, Appendix M, Method 201A/202 and 40 CFR 60, Appendix A, Method 5 and Method 25A (or an alternate method as approved by the Division).
   i. The permittee shall record the pressure drop across the control device and volumetric flowrate range of the control device during each test.
   ii. The permittee shall perform testing at the inlet and outlet of the PPS-HE system for PM, PM\(_{10}\), and PM\(_{2.5}\) and determine the control efficiency of the device.
**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Monthly and 12-Month rolling process weight (tons).
   
b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
   
c. For EU 96, the permittee shall monitor, daily, the pressure drop across the PPS-HE system. [401 KAR 52:020, Section 10]
   
d. For EU 96, the permittee shall continuously monitor the volumetric flowrate of the PPS-HE system. [401 KAR 52:020, Section 10]
   
e. Refer to **SECTION F** for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation; and
      ii. Monthly and 12-Month rolling process weight (tons).
   
b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
   
c. For EU 96, the permittee shall maintain records of the daily pressure drop across the PPS-HE system. [401 KAR 52:020, Section 10]
   
d. For EU 96, the permittee shall maintain records of the volumetric flowrate of the PPS-HE system. [401 KAR 52:020, Section 10]
   
e. Refer to **SECTION F** for general recordkeeping requirements.

6. **Specific Reporting Requirements:**
   Refer to **SECTION F** for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. **Specific Control Equipment Operating Conditions:**
   a. The permittee shall operate the PPS-HE system according to the manufacturer’s instructions or good air pollution control practices as approved by the Division. [401 KAR 52:020, Section 10]

   b. The permittee shall maintain the pressure drop of the PPS-HE system within the range recommended by the manufacturer or an alternative range approved by the Division. [401 KAR 52:020, Section 10]

   c. The permittee shall ensure that no less than 90% of the emissions from EU 96 are captured and directed to the PPS-HE system while EU 96 is in operation when processing a slab into a coil. [To preclude 401 KAR 51:017]

   d. The permittee shall demonstrate, annually, that the volumetric flowrate was maintained at or above 225,000 acfm to achieve 90% capture efficiency while EU 96 is in operation. The permittee shall identify any excursions, which are defined as any per-coil average flowrate below the minimum value specified in the capture efficiency design analysis report submitted with the test protocol, in the annual report. Volumetric flowrate requirements do not apply when the unit is not operational (i.e., is not actively processing coils). [401 KAR 52:020, Section 10]

   e. The permittee shall operate and maintain the control devices associated with EU 30 and EU 97 in accordance with the manufacturer’s specifications or good air pollution control practices as approved by the Division. [401 KAR 52:020, Section 10]

   f. Refer to SECTION E.
### SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Emission Group G – Direct Fired Process Heaters**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Fuel Used</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Homogenization Soaking Pit #1</td>
<td>28.2</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965; Rebuilt 2018</td>
</tr>
<tr>
<td>32</td>
<td>Homogenization Soaking Pit #3 &amp; #4</td>
<td>29.8</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>33</td>
<td>Homogenization Soaking Pit #7</td>
<td>25</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965; Rebuilt 2016</td>
</tr>
<tr>
<td>34</td>
<td>Homogenization Soaking Pit #8</td>
<td>14.9</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>35</td>
<td>Homogenization Soaking Pit #9</td>
<td>14.9</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>36</td>
<td>Homogenization Soaking Pit #10</td>
<td>14.9</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>37</td>
<td>Homogenization Soaking Pit #5</td>
<td>16.2</td>
<td>Natural Gas</td>
<td>None</td>
<td>11/15/1972</td>
</tr>
<tr>
<td>38</td>
<td>Homogenization Soaking Pit #6</td>
<td>16.2</td>
<td>Natural Gas</td>
<td>None</td>
<td>11/15/1972</td>
</tr>
<tr>
<td>39</td>
<td>Homogenization Soaking Pit #11</td>
<td>32</td>
<td>Natural Gas</td>
<td>None</td>
<td>11/15/1972</td>
</tr>
<tr>
<td>40</td>
<td>Homogenization Soaking Pit #12</td>
<td>32</td>
<td>Natural Gas</td>
<td>None</td>
<td>11/15/1972</td>
</tr>
<tr>
<td>41</td>
<td>East Sunbeam C-204-79 Tunnel Furnace</td>
<td>60.9</td>
<td>Natural Gas</td>
<td>None</td>
<td>10/31/1977; Rebuilt 2017</td>
</tr>
<tr>
<td>42</td>
<td>West Sunbeam C-204-79 Tunnel Furnace</td>
<td>60.9</td>
<td>Natural Gas</td>
<td>None</td>
<td>10/31/1977; Rebuilt 2017</td>
</tr>
</tbody>
</table>

**APPLICABLE REGULATIONS:**
401 KAR 50:055, General compliance requirements

**STATE-ORIGIN REQUIREMENTS:**
401 KAR 63:020, Potentially hazardous matter or toxic substances

1. **Operating Limitations:**
The permittee shall use only natural gas in the emission units listed above.

2. **Emission Limitations:**
The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020 when burning natural gas.

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
   a. The permittee shall monitor the monthly natural gas usage for each emission unit in MMscf. [401 KAR 52:020, Section 10]

   b. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. The permittee shall maintain records of the monthly natural gas usage for each emission unit in MMscf. [401 KAR 52:020, Section 10]

   b. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
Refer to SECTION F for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group H – Cold Rolling Mills

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
<td></td>
</tr>
<tr>
<td>Area 4: Cold Rolling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>589 Single Stand Cold Rolling Mill</td>
<td>150</td>
<td>1,314,000</td>
<td>Heavy Oil Scrubbing (HOS) System 7/1/1988  Modified 2015</td>
</tr>
<tr>
<td>46</td>
<td>590 Single Stand Cold Rolling Mill</td>
<td>150</td>
<td>1,314,000</td>
<td>HOS system             6/15/1987 Modified 2015</td>
</tr>
<tr>
<td>119</td>
<td>591 Wide-Sheet Cold Rolling Mill</td>
<td>250</td>
<td>844,887</td>
<td>HOS system             2015</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations
40 CFR 64, Compliance Assurance Monitoring (CAM), For EU 119 for VOC

PRECLUDED REGULATION:
401 KAR 51:017, Prevention of significant deterioration of air quality

NON-APPLICABLE REGULATIONS:
40 CFR 64, Compliance assurance monitoring (CAM). For EU 45, 46, and EU 119 (for PM, PM_{10}, and PM_{2.5}): Does not apply because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

1. Operating Limitations:
   a. The permittee shall restrict throughputs for all units such that the emission limitations specified in 2. Emission Limitations are not exceeded.

   b. The permittee shall operate the associated HOS systems at all times EUs 45, 46, or 119 are operating. [To preclude 401 KAR 51:017]

2. Emission Limitations:
   a. Opacity Standard: The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

   Compliance Demonstration Method:
   Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

   b. Mass Emission Standard: The permittee shall not cause, suffer, allow or permit the emission into the on air from a control device or stack associated with any affected facility
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
i. For process weights < 0.5 tons/hour: \( E = 2.34 \)
ii. For process weights < 30 tons/hour: \( E = 3.59P^{0.62} \)
iii. For process weights \( \geq 30 \) tons/hour: \( E = 17.31P^{0.16} \)

Where:
E is the rate of the emission in lb/hour
P is the process weight rate in tons/hour.

Compliance Demonstration Method:
Refer to 1. Operating Limitations, 3. Testing Requirements, and 7. Specific Control Equipment Operating Conditions.

c. The permittee shall not exceed the emission limitations specified in the following table, on a rolling 12-month basis: [To preclude 401 KAR 51:017]

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Unit Name</th>
<th>Pollutant</th>
<th>Emission Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>589 Single Stand Cold Rolling Mill</td>
<td>PM(_{10})</td>
<td>9.68 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM(_{2.5})</td>
<td>8.46 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VOC</td>
<td>38.19 tpy</td>
</tr>
<tr>
<td>46</td>
<td>590 Single Stand Cold Rolling Mill</td>
<td>PM(_{10})</td>
<td>7.18 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM(_{2.5})</td>
<td>6.38 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VOC</td>
<td>24.90 tpy</td>
</tr>
<tr>
<td>119</td>
<td>591 Wide-Sheet Cold Rolling Mill</td>
<td>PM(_{10})</td>
<td>20.4 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM(_{2.5})</td>
<td>18.56 tpy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VOC</td>
<td>41.21 tpy</td>
</tr>
</tbody>
</table>

Compliance Demonstration Method:
Refer to 3. Testing Requirements, 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements. Refer to SECTION D(3) for calculations related to the ton per year limits.

3. Testing Requirements:
a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

b. The permittee shall conduct stack testing for PM, PM\(_{10}\), PM\(_{2.5}\), and VOC on EU 45, 46, and 119 no later than 5 years after the previous stack test and every 5 years thereafter using 40 CFR 51, Appendix M, Method 201A/202 and 40 CFR 60, Appendix A, Method 5 and Method 25A (or an alternate method as approved by the Division).

i. The permittee shall record the pressure drop across the control device and volumetric flowrate range of the control device during each test.

ii. The permittee shall perform testing at the inlet and outlet of each of the HOS systems and determine the control efficiency of each of the devices.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
      ii. Monthly and 12-Month rolling process weight (tons).

   b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

   c. The permittee shall monitor, continuously, the volumetric flowrate of the exhaust gas stream of each HOS system. [401 KAR 52:020, Section 10]

   d. Refer to Appendix A for CAM requirements pursuant to 40 CFR 64 for EU 119.

   e. Refer to SECTION F for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
      ii. Monthly and 12-Month rolling process weight (tons).

   b. The permittee shall retain records of the qualitative visual observations required by 4. **Specific Monitoring Requirements (b),** including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

   c. The permittee shall maintain records of the volumetric flowrate of each HOS system. [401 KAR 52:020, Section 10]

   d. For EU 119, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]

   e. For EU 119, instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]

f. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
   a. For EU 119, on and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with SECTION F. [40 CFR 64.9(a)(1)]
   
   b. For EU 119, a report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
      i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
      ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
      iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
      iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]

   c. Refer to Appendix A for reporting requirements under 40 CFR 64 for EU 119.
   
   d. Refer to SECTION F for general reporting requirements.

7. Specific Control Equipment Operating Conditions:
   a. The permittee shall operate each HOS system according to the manufacturer’s instructions or good air pollution control practices as approved by the Division. [401 KAR 52:020, Section 10]
   
   b. The permittee shall ensure that no less than 90% of the emissions from EU 46 and 119 and no less than 67.5% of the emissions from EU 45 are captured and directed to the HOS systems while the applicable units are in operation. [401 KAR 52:020, Section 10]
   
   c. The permittee shall demonstrate, annually, that the volumetric flowrate was maintained at or above 75,500 acfm to achieve 90% capture efficiency or 67.5% capture efficiency, as applicable. The permittee shall identify any excursions which are defined as any per coil average flowrate below the minimum values specified in capture efficiency design analysis report submitted with the test protocols for each unit. Volumetric flowrate requirements do
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

not apply when the unit is not operational (i.e., are not actively processing coils. [401 KAR 52:020, Section 10]

d. Refer to SECTION E.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group I – General Process Boilers (> 10 MMBtu)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Fuel Used</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 5: Boilers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0A1</td>
<td>Oil House Boiler #1</td>
<td>25.1</td>
<td>Natural Gas</td>
<td>None</td>
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<tr>
<td>0A2</td>
<td>Oil House Boiler #2</td>
<td>25.1</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/15/1992</td>
</tr>
<tr>
<td>122-1</td>
<td>Hot Water Generator #1</td>
<td>21</td>
<td>Natural Gas</td>
<td>None</td>
<td>2015</td>
</tr>
<tr>
<td>122-2</td>
<td>Hot Water Generator #2</td>
<td>21</td>
<td>Natural Gas</td>
<td>None</td>
<td>2017</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers
401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c to 60.48c (Subpart Dc), Standards of Performance for Small Industrial Steam Generating Units
401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

PRECLUDED REGULATION:

401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:
   a. The permittee shall meet each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. [40 CFR 63.7500(a)(1)]

   b. At all times, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

   c. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

Compliance Demonstration Method:

A. The permittee shall demonstrate continuous compliance with each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies according to 40 CFR 63.7540(a)(1) through (19). [40 CFR 63.7540(a)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. The permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). The permittee must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [40 CFR 63.7540(a)(10)(iii)]

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]

vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C). [40 CFR 63.7540(a)(10)(vi)]

1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]

2) A description of any corrective actions taken as a part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]

3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]

C. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

d. The permittee shall limit usage of natural gas in EU 122-1 and EU 122-2 to less than 13.74 MMscf/yr each, on a 12-month rolling basis. [To preclude 401 KAR 51:017]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Refer to 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements.

2. Emission Limitations:
   a. **Mass Emission Standard:** The permittee shall not cause emissions of particulate matter in excess of the following: [401 KAR 59:015, Section 4(1)(c)]
      i. For EU 0A1: 0.38 lb/MMBtu
      ii. For EU 0A2: 0.45 lb/MMBtu
      iii. For EU 122-1: 0.35 lb/MMBtu
      iv. For EU 122-2: 0.33 lb/MMBtu
   
   b. **Opacity Standard:** The permittee shall not cause emissions of particulate matter in excess of 20 percent. [401 KAR 59:015, Section 4(2)]

   c. **SO₂ Standard:** The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of the following: [401 KAR 59:015, Section 5(1)(c)(2.)]
      i. For EU 0A1: 1.55 lb/MMBtu
      ii. For EU 0A2: 2.06 lb/MMBtu
      iii. For EU 122-1: 1.29 lb/MMBtu
      iv. For EU 122-2: 1.17 lb/MMBtu

   Compliance Demonstration Method:
The emission units listed above are assumed to be in compliance with the particulate, opacity, and sulfur dioxide emission standards while burning natural gas.

3. Testing Requirements:
Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
   a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
      i. Monthly natural gas consumption in MMscf for each emission unit; and
      ii. For EU 122-1 and EU 122-2, the 12-month rolling natural gas consumption in MMscf.

   b. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. Except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the permittee shall record and maintain records of the amount of each fuel combusted during each operating day. [40 CFR 60.48c(g)(1)]
      i. As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1) the permittee may elect to record and maintain records of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2): [40 CFR 63.7555(a)]
   i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or the applicable periodic compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
   ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]

c. The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

d. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]

e. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

f. For EU 122-1 and EU 122-2, the permittee shall maintain records of the monthly and 12-month rolling natural gas consumption in MMscf. [401 KAR 52:020, Section 10]

g. Refer to SECTION F for general recordkeeping requirements.

6. **Specific Reporting Requirements:**
   a. The permittee shall meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 and in 40 CFR 63, Subpart A. Some of the notifications shall be submitted before the permittee is required to comply with the work practice standards in 40 CFR 63, Subpart DDDDD. [40 CFR 63.7495(d)]

   b. The permittee shall report each instance in which a work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD was not met. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

   c. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]

   d. The permittee shall submit each report in Table 9 to 40 CFR 63, Subpart DDDDD that applies. [40 CFR 637550(a)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report, according to 40 CFR 63.7550(h), by the date in Table 9 to 40 CFR 63, Subpart DDDDD and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual compliance report, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]

i. Each semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual compliance reports must cover the applicable 1-year period from January 1 to December 31. [40 CFR 63.7550(b)(3)]

ii. Each semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual compliance reports must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]

iii. The permittee may submit the first and subsequent compliance reports according to the dates the Division has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 64.7550(b)(5)]

g. The permittee must submit all reports required by Table 9 of 40 CFR 63, Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
h. Refer to SECTION F for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group J – General Process Boilers (<10 MMBtu)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Fuel Used</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>Paint Storage Building Boiler #2</td>
<td>2.25</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>116</td>
<td>Paint Storage Building Boiler #3</td>
<td>2.25</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>117</td>
<td>Effluent Treatment Building Boiler #2</td>
<td>1.8</td>
<td>Natural Gas</td>
<td>None</td>
<td>12/31/2013</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 59:015, New indirect heat exchangers
401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.780 to 63.7575, Tables 1 to 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c to 60.48c (Subpart Dc), Standards of Performance for Small Industrial Steam Generating Units. Does not apply to EU 115, 116 & 117 because the boilers listed all have a heat input capacity less than 10 MMBtu/hr

1. Operating Limitations:
   a. The permittee shall meet each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. [40 CFR 63.7500(a)(1)]

   b. At all times, the permittee shall operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

   c. For EUs 115, 116, and 117, the permittee must conduct a 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up required by 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. [40 CFR 63.7515(d)]

Compliance Demonstration Method:
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A. The permittee shall demonstrate continuous compliance with each work practice standard in Table 3 to 40 CFR 63, Subpart DDDD that applies according to 40 CFR 63.7540(a)(19) through (19). [40 CFR 63.7540(a)]

B. For EU's 115, 116, and 117, the permittee must conduct a tune-up of the boiler or process heater every five years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. [40 CFR 63.7540(a)(12)]

C. The permittee must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [40 CFR 63.7540(a)(10)(iii)]

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]

vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C). [40 CFR 63.7540(a)(10)(vi)]

1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]

2) A description of any corrective actions taken as a part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]

3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

2. Emission Limitations:
   a. Mass Emission Standard: The permittee shall not cause emissions of particulate matter in excess of the following: [401 KAR 59:015, Section 4(1)(c)]
      i. For EU 115: 0.37 lb/MMBtu
      ii. For EU 116: 0.37 lb/MMBtu
      iii. For EU 117: 0.37 lb/MMBtu

   b. Opacity Standard: The permittee shall not cause emissions of particulate matter in excess of 20 percent. [401 KAR 59:015, Section 4(2)]

   c. SO₂ Standard: The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of the following: [401 KAR 59:015, Section 5(1)(c)(2.)]
      i. For EU 115: 1.47 lb/MMBtu
      ii. For EU 116: 1.47 lb/MMBtu
      iii. For EU 117: 1.47 lb/MMBtu

Compliance Demonstration Method
The emission units listed above are assumed to be in compliance with the particulate, opacity, and sulfur dioxide emission standards while burning natural gas.

3. Testing Requirements:
Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly natural gas usage, in MMscf; and
      ii. Monthly hours of operation.

   b. Refer to SECTION F for general monitoring requirements.

5. Specific Recordkeeping Requirements:
   a. The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2): [40 CFR 63.7555(a)]
      i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or the applicable periodic compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

   ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.755(a)(2)]

b. The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

   c. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]

   d. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

   e. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]

   i. Monthly natural gas usage, in MMscf; and

   ii. Monthly hours of operation.

f. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:

a. The permittee shall meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 and in 40 CFR 63, Subpart A. Some of the notifications shall be submitted before the permittee is required to comply with the work practice standards in 40 CFR 63, Subpart DDDDD. [40 CFR 63.7495(d)]

b. The permittee shall report each instance in which a work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD was not met. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

c. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (e), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]

d. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report, according to 40 CFR 63.7550(h), by the date in Table 9 to 40 CFR 63, Subpart DDDDD and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct a biennial or 5-year tune-up according to 40 CFR 63.7540(a)(11) or (12), respectively, and not subject to emission limits or Table 4 operating limits, the permittee may submit only a biennial or 5-year compliance report, as applicable, as
specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]

i. Each semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Biennial and 5-year compliance reports must cover the applicable 2- or 5-year periods from January 1 to December 31. [40 CFR 63.7550(b)(3)]

ii. Each semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Biennial and 5-year compliance reports must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]

iii. The permittee may submit the first and subsequent compliance reports according to the dates the Division has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 64.7550(b)(5)]

e. The permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii): [40 CFR 63.7550(c)(1)]

i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]

ii. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]

iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]

iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a biennial or 5-year tune-up according to 40 CFR 63.7540(a)(11) or (12), respectively. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]

f. The permittee must submit all reports required by Table 9 of 40 CFR 63, Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

g. Refer to SECTION F for general reporting requirements.
### Emission Group K – Process Heaters

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Fuel Used</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>ConstructionCommenced</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hourly (tons/hr)</td>
<td>Annual (tons/yr)</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Annealing Furnace #1, 2, 3 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>35.7&lt;sup&gt;1&lt;/sup&gt;</td>
<td>312,732&lt;sup&gt;1&lt;/sup&gt;</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.05&lt;sup&gt;2&lt;/sup&gt;</td>
<td>166,878&lt;sup&gt;2&lt;/sup&gt;</td>
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</tr>
<tr>
<td>48</td>
<td>Annealing Furnace #3, 13, 14 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>35.7&lt;sup&gt;1&lt;/sup&gt;</td>
<td>312,732&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>19.05&lt;sup&gt;2&lt;/sup&gt;</td>
<td>166,878&lt;sup&gt;2&lt;/sup&gt;</td>
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</tr>
<tr>
<td>49</td>
<td>Annealing Furnace #10 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8&lt;sup&gt;1&lt;/sup&gt;</td>
<td>208,488&lt;sup&gt;1&lt;/sup&gt;</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.7&lt;sup&gt;2&lt;/sup&gt;</td>
<td>111,252&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>50</td>
<td>Annealing Furnace #11 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8&lt;sup&gt;1&lt;/sup&gt;</td>
<td>208,488&lt;sup&gt;1&lt;/sup&gt;</td>
<td>None</td>
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<tr>
<td></td>
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<td>12.7&lt;sup&gt;2&lt;/sup&gt;</td>
<td>111,252&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>51</td>
<td>Annealing Furnace #12 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8&lt;sup&gt;1&lt;/sup&gt;</td>
<td>208,488&lt;sup&gt;1&lt;/sup&gt;</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.7&lt;sup&gt;2&lt;/sup&gt;</td>
<td>111,252&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Annealing Furnace #1,2 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
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<tr>
<td>53</td>
<td>Annealing Furnace #3 Combustion</td>
<td>12 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
</tr>
<tr>
<td>54</td>
<td>Annealing Furnace #13,14 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
</tr>
<tr>
<td>55</td>
<td>Annealing Furnace #4 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
</tr>
<tr>
<td>56</td>
<td>Annealing Furnace #10 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
</tr>
<tr>
<td>57</td>
<td>Annealing Furnace #11 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>None</td>
</tr>
<tr>
<td>58</td>
<td>Annealing Furnace #12 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
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<td>None</td>
</tr>
</tbody>
</table>
### SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Fuel Used</th>
<th>Maximum Capacity Hourly (tons/hr)</th>
<th>Annual (tons/yr)</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>86</td>
<td>Annealing Furnace #5, 6 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8(^1) 208,488(^1)</td>
<td>12.7(^2) 111,252(^2)</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>87</td>
<td>Annealing Furnace #5, 6 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>23.8(^1) 208,488(^1)</td>
<td>12.7(^2) 111,252(^2)</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>88</td>
<td>Annealing Furnace #7, 8 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8(^1) 208,488(^1)</td>
<td>12.7(^2) 111,252(^2)</td>
<td>None</td>
<td>12/15/1965</td>
</tr>
<tr>
<td>89</td>
<td>Annealing Furnace #7, 8 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>None</td>
<td>12/15/1965</td>
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</tr>
<tr>
<td>90</td>
<td>Annealing Furnace #9 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>23.8(^1) 208,488(^1)</td>
<td>12.7(^2) 111,252(^2)</td>
<td>None</td>
<td>12/15/1965</td>
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<td>91</td>
<td>Annealing Furnace #9 Combustion</td>
<td>24 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>None</td>
<td>12/15/1965</td>
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</tr>
<tr>
<td>107</td>
<td>Annealing Furnace #15 Atmosphere</td>
<td>---</td>
<td>---</td>
<td>1.32(^1) 11,563(^1)</td>
<td>0.71(^2) 6,220(^2)</td>
<td>None</td>
<td>12/31/1997</td>
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<tr>
<td>108</td>
<td>Annealing Furnace #15 Combustion</td>
<td>4.8 Natural Gas</td>
<td>---</td>
<td>---</td>
<td>None</td>
<td>12/31/1997</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Annealing Cold Mill Stock  
\(^2\)Annealing Hot Mill Stock

**APPLICABLE REGULATIONS:**  
401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.780 to 63.7575, Tables 1 to 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

**NON-APPLICABLE REGULATIONS:**  
401 KAR 59:015, New indirect heat exchangers. Does not apply to the annealing furnaces because they are direct fired combustion units.

1. **Operating Limitations:**  
a. For EU 108: The permittee must complete a tune-up every 5 years as specified in 40 CFR 63.7540. [40 CFR 63.7500(e)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall meet each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. [40 CFR 63.7500(a)(1)]

c. At all times, the permittee shall operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

d. For EUs 52, 53, 54, 55, 56, 57, 58, 87, 89, and 91, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

Compliance Demonstration Method:
A. The permittee shall demonstrate continuous compliance with each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies according to 40 CFR 63.7540(a)(1) through (19). [40 CFR 63.7540(a)]

B. For EUs 52, 53, 54, 55, 56, 57, 58, 87, 89, and 91, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). [40 CFR 63.7540(a)(10)]

C. For EU 108, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. [40 CFR 63.7540(a)(12)]

D. The permittee must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [40 CFR 63.7540(a)(10)(iii)]
iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]

vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C). [40 CFR 63.7540(a)(10)(vi)]

1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]

2) A description of any corrective actions taken as a part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]

3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]

E. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

2. **Emission Limitations:**
   None.

3. **Testing Requirements:**
   Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly natural gas usage, in MMscf; and
      ii. Monthly hours of operation.

   b. Refer to **SECTION F** for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2): [40 CFR 63.7555(a)]
      i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or the applicable periodic
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]

b. The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

c. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]

d. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

e. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
   i. Monthly natural gas usage, in MMscf; and
   ii. Monthly hours of operation.

f. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
   a. The permittee shall meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 and in 40 CFR 63, Subpart A. Some of the notifications shall be submitted before the permittee is required to comply with the work practice standards in 40 CFR 63, Subpart DDDDD. [40 CFR 63.7495(d)]

b. The permittee shall report each instance in which a work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD was not met. These deviations shall be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]

c. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]

d. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report, according to 40 CFR 63.7550(h), by the date in Table 9 to 40 CFR 63, Subpart DDDDD and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct an annual or 5-year tune-up according to 40 CFR 63.7540(a)(10) or (12), respectively, and not subject to emission limits or Table 4 operating limits, the
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

permittee may submit only an annual or 5-year compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]

i. Each semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual and 5-year compliance reports must cover the applicable 1- or 5-year periods from January 1 to December 31. [40 CFR 63.7550(b)(3)]

ii. Each semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual and 5-year compliance reports must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]

iii. The permittee may submit the first and subsequent compliance reports according to the dates the Division has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 64.7550(b)(5)]

e. The permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii); [40 CFR 63.7550(c)(1)]

i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]

ii. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]

iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]

iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or 5-year tune-up according to 40 CFR 63.7540(a)(10) or (12), respectively. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]

f. The permittee must submit all reports required by Table 9 of 40 CFR 63, Subpart DDDDD, electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

g. Refer to SECTION F for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group L – Tension Leveler Fugitives

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 6: Coil Coating/Finishing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>652 Tension Leveler Fugitives</td>
<td>0.016</td>
<td>None</td>
<td>12/31/1978</td>
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<tr>
<td>84</td>
<td>653 Tension Leveler Fugitives</td>
<td>0.056</td>
<td>None</td>
<td>12/31/1989</td>
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<td>98</td>
<td>661 Tension Leveler Fugitives</td>
<td>0.0075</td>
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<td>12/31/1978</td>
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<td>104</td>
<td>651 Tension Leveler Fugitives</td>
<td>0.012</td>
<td>None</td>
<td>12/12/2006</td>
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</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 63:010, *Fugitive emissions*

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* for EU 104

1. **Operating Limitations:**
   a. The permittee shall restrict the throughput of EU 104 such that the limitation in 2. **Emission Limitations** is not exceeded.

   b. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precautions to prevent particulate matter from becoming airborne. [401 KAR 63:010, Section 3(1)]

   c. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling, and storage are done be tightly closed and ventilated in a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

2. **Emission Limitations:**
   From EU 104, the permittee shall not allow emissions of VOC to exceed 30 tons/yr on a rolling 12-month basis. [To preclude 401 KAR 51:017]

**Compliance Demonstration Method:**
Refer to SECTION D(3). The VOC emission factor for EU 104 shall be 0.73 lbs per lb solvent used. A change to this emission factor may be requested by the permittee, based on material
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

balance or other demonstration to the Division. Any emission factor change shall be approved by the Division prior to use. Records of any such change in the emission factor used shall be maintained at the source.

3. Testing Requirements:
Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
a. For EU 104, the permittee shall monitor the amount of solvent used monthly in tons. [401 KAR 52:020, Section 10]

b. For EU 83, 84 and 98, the permittee shall monitor the amount of solvent used annually in tons [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:
a. For EU 104, the permittee shall maintain records of the amount of solvent used monthly in tons. [401 KAR 52:020, Section 10]

b. For EU 83, 84 and 98, the permittee shall maintain records of the amount of solvent used annually in tons. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:
The permittee shall include usage data from 4. Specific Monitoring Requirements in each semi-annual report.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group M – Existing Emergency CI Engine

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Title</th>
<th>Maximum Rating (HP)</th>
<th>Model</th>
<th>Fuel Used</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>NCH Emergency Generator</td>
<td>360</td>
<td>Cummins NTA 855-G</td>
<td>Diesel</td>
<td>12/31/2004</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 63:002, Section 2(4)(eeeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

NON-APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(ddddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Does not apply to EU 105 because it was constructed prior to July 11, 2005.

1. Operating Limitations:
   a. The permittee shall comply with the requirements in Table 2c to 40 CFR 63, Subpart ZZZZ which apply: [40 CFR 63.6602]
      i. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63, Subpart ZZZZ, Table 2c(1.)(a)]
        1) The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in 40 CFR 63, Subpart ZZZZ, Table 2c. [40 CFR 63, Subpart ZZZZ, Table 2c, Footnote 2]
        2) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR 63, Subpart ZZZZ, Table 2c. The oil analysis must be performed at the same frequency specified for changing the oil in 40 CFR 63, Subpart ZZZZ, Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. [40 CFR 63.6625(i)]
   ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2c(1.)(b)]
iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2c(1.(c)]

iv. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63, Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, Footnote 1]

b. If the emergency CI stationary RICE operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [40 CFR 63.6604(b)]

c. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply at all times. [40 CFR 63.6605(a)]

d. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

e. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]

f. The permittee shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

g. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 40 CFR 63, Subpart ZZZZ, Table 2c apply. [40 CFR 63.6625(h)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

h. The permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4) the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]

i. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]

ii. The permittee may operate the emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]

1) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.[40 CFR 63.6640(f)(2)(i)].

iii. Emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]

2. Emission Limitations:
   None

3. Testing Requirements:
   Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:
   a. The permittee shall monitor hours of operation as recorded by the non-resettable hour meter and the purpose of operation. [401 KAR 52:020, Section 10]

   b. Refer to SECTION F for general monitoring requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**
   a. The permittee must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c). [40 CFR 63.6655(a)]
      i. A copy of each notification and report submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
      ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
      iii. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
   
   b. The permittee shall keep the records required in Table 6 of 40 CFR 63, Subpart ZZZZ to show continuous compliance with each operating limitation that applies. [40 CFR 63.6655(d)]
      i. The permittee shall demonstrate continuous compliance with the work or management practices by: [40 CFR 63, Subpart ZZZZ, Table 6(9.)(a)]
         1) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or [40 CFR 63, Subpart ZZZZ, Table 6(9.)(a)(i)]
         2) Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63, Subpart ZZZZ, Table 6(9.)(a)(ii)]
   
   c. The permittee shall keep records of maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the maintenance plan. [40 CFR 63.6655(e)]
   
   d. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
   
   e. All records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
   
   f. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660(b)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

g. The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(c)]

h. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
   a. The permittee shall report each instance in which the permittee did not meet each operating limitation in 40 CFR 63, Subpart ZZZZ, Table 2c that applies. These instances are deviations from the operating limitations in 40 CFR 63, Subpart ZZZZ. These deviations shall be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]

   b. The permittee shall report all deviations as defined in 40 CFR 63, Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 7 of 40 CFR 63, Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR 63, Subpart ZZZZ, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the Division. [40 CFR 63.6650(f)]

   c. If the engine operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee shall submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3). [40 CFR 63.6650(h)]

   d. Refer to SECTION F for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group N – New Emergency CI Engines < 500 HP

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Rating (HP)</th>
<th>Model</th>
<th>Fuel Used</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 7: Emergency Generators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Data Center Emergency Generator 1</td>
<td>324</td>
<td>Cummins DSGAB</td>
<td>Diesel</td>
<td>12/18/2015</td>
</tr>
<tr>
<td>125</td>
<td>Data Center Emergency Generator 2</td>
<td>324</td>
<td>Cummins DSGAB</td>
<td>Diesel</td>
<td>1/1/2015</td>
</tr>
<tr>
<td>126</td>
<td>CALP Line #1 Emergency Generator</td>
<td>449</td>
<td>Generac SD300</td>
<td>Diesel</td>
<td>1/1/2016</td>
</tr>
<tr>
<td>127</td>
<td>CALP Line #2 Emergency Generator</td>
<td>449</td>
<td>Generac SD300</td>
<td>Diesel</td>
<td>1/1/2016</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(ddddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
401 KAR 63:002, Section 2(4)(eeeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

1. Operating Limitations:
   a. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]

   b. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]

   c. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g):
      [40 CFR 60.4211(a)]
      i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
      ii. Change only those emission-related settings that are permitted by the manufacturer; and, [40 CFR 60.4211(a)(2)]
      iii. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)(3)]

   d. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4211(f)(1) through
(3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart III and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]

ii. The permittee may operate the emergency stationary ICE for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2). [40 CFR 60.4211(f)(2)]

1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Division for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]

1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4211(f)(3)(i)(A) through (E) are met. [40 CFR 60.4211(f)(3)(i)]

e. If the permittee does not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instructions, or if the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows: The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

f. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart III, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)(6)l]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. **Emissions Limitations:**
The permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. [40 CFR 60.4205(b)]

**Compliance Demonstration Method:**
The permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

3. **Testing Requirements:**
Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. **Specific Monitoring Requirements:**
   a. If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
   
   b. The permittee shall monitor the hours of operation and purpose of operation for each engine. [401 KAR 52:020, Section 10]
   
   c. Refer to **SECTION F** for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
   
   b. If the emergency stationary CI ICE operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 63.4214(d)(1) through (3). [40 CFR 60.4214]
   
   c. The permittee shall maintain records of the engine certification as required in **2. Emissions Limitations**. [401 KAR 52:020, Section 10]
   
   d. The permittee shall maintain record of the hours of operation and purpose of operation for each engine. [401 KAR 52:020, Section 10]
   
   e. Refer to **SECTION F** for general recordkeeping requirements.

6. **Specific Reporting Requirements:**
Refer to **SECTION F** for general reporting requirements.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group O – New Emergency CI Fire Pump

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Rating (HP)</th>
<th>Model</th>
<th>Fuel Used</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 7: Emergency Generators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>128</td>
<td>CALP Area Fire Pump Engine</td>
<td>157</td>
<td>Clarke JU4HUFADY Fire pump (John Deere 4045 Engine)</td>
<td>Diesel</td>
<td>1/1/2016</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

1. Operating Limitations:
   a. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]

   b. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for non-road diesel fuel. [40 CFR 60.4207(b)]

   c. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
      i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
      ii. Change only those emission-related settings that are permitted by the manufacturer; [40 CFR 60.4211(a)(2)] and,
      iii. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)(3)]

   d. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
      i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. The permittee may operate the emergency stationary ICE for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2). [40 CFR 60.4211(f)(2)]

1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Division for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]

1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions 40 CFR 60.4211(f)(3)(i)(A) through (E) are met. [40 CFR 60.4211(f)(3)(i)]

e. If the permittee does not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instructions, or if the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows: The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

f. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart III, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)(6)]

2. Emission Limitations:
   The permittee shall comply with the emission standards in Table 4 to 40 CFR 60, Subpart III, for all pollutants. [40 CFR 60.4205(c)]
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>NMHC + NOx g/KW-hr (g/HP-hr)</th>
<th>PM g/KW-hr (g/HP-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>128</td>
<td>4.0 (3.0)</td>
<td>0.30 (0.22)</td>
</tr>
</tbody>
</table>

**Compliance Demonstration Method:**
The permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c), for the same model year and maximum engine (or in the case of fire pumps, NFPA nameplate) power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

3. **Testing Requirements:**
Pursuant to 401 KAR 52:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 52:015 shall be conducted if required by the Cabinet.

4. **Specific Monitoring Requirements:**
   a. If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
   b. The permittee shall monitor the hours of operation and purpose of operation for the engine. [401 KAR 52:020, Section 10]
   c. Refer to SECTION F for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
   b. If the emergency stationary CI ICE operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 63.4214(d)(1) through (3). [40 CFR 60.4214]
   c. The permittee shall maintain records of the engine certification as required in 2. Emissions Limitations. [401 KAR 52:020, Section 10]
   d. The permittee shall maintain record of the hours of operation and purpose of operation for each engine. [401 KAR 52:020, Section 10]
   e. Refer to SECTION F for general recordkeeping requirements.

6. **Specific Reporting Requirements:**
   Refer to SECTION F for general reporting requirements.
### SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### Emission Group P – CALP Line Operations

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>120A1</td>
<td>CALP Line #1 Alkaline Cleaning Operation</td>
<td>159,834 tons/yr</td>
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<td>Wet Droplet Separator</td>
<td>2015</td>
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<tr>
<td>120A2</td>
<td>CALP Line #1 Alkaline Cleaning Strip Dryer</td>
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<td>2.49</td>
<td>None</td>
<td>2016</td>
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<tr>
<td>120B</td>
<td>CALP Line #1 Heat Treat Furnace</td>
<td>---</td>
<td>40.8</td>
<td>None</td>
<td>2015</td>
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<tr>
<td>120E1</td>
<td>CALP Line #1 Pickling Operation</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Wet Scrubber</td>
<td>2015</td>
</tr>
<tr>
<td>120E2</td>
<td>CALP Line #1 Pickling Strip Dryer</td>
<td>---</td>
<td>2.49</td>
<td>None</td>
<td>2016</td>
</tr>
<tr>
<td>120F1</td>
<td>CALP Line #1 Post-Treatment Operation</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Wet Scrubber</td>
<td>2015</td>
</tr>
<tr>
<td>120F2</td>
<td>CALP Line #1 Post-Treatment Strip Dryer</td>
<td>---</td>
<td>7.47</td>
<td>None</td>
<td>2016</td>
</tr>
<tr>
<td>120G</td>
<td>CALP Line #1 Aging Furnace</td>
<td>---</td>
<td>15.96</td>
<td>None</td>
<td>2015</td>
</tr>
<tr>
<td>120H</td>
<td>CALP Line #1 Electrostatic Lubing</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>None</td>
<td>2015</td>
</tr>
<tr>
<td>121A1</td>
<td>CALP Line #2 Alkaline Cleaning Operation</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Wet Droplet Separator</td>
<td>2017</td>
</tr>
<tr>
<td>121A2</td>
<td>CALP Line #2 Alkaline Cleaning Strip Dryer</td>
<td>---</td>
<td>2.49</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>121B</td>
<td>CALP Line #2 Heat Treat Furnace</td>
<td>---</td>
<td>40.8</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>121D</td>
<td>CALP Line #2 Tension Leveler</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Carbon Adsorber</td>
<td>2017</td>
</tr>
<tr>
<td>121E1</td>
<td>CALP Line #2 Pickling Operation</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Wet Scrubber</td>
<td>2017</td>
</tr>
<tr>
<td>121E2</td>
<td>CALP Line #2 Pickling Strip Dryer</td>
<td>---</td>
<td>2.49</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>121F1</td>
<td>CALP Line #2 Post-Treatment Operation</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>Wet Scrubber</td>
<td>2017</td>
</tr>
</tbody>
</table>
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Burner Maximum Capacity (MMBtu/hr)</th>
<th>Control Equipment</th>
<th>Construction Commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>121F2</td>
<td>CALP Line #2 Post-Treatment Strip-Dryer</td>
<td>---</td>
<td>7.47</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>121G</td>
<td>CALP Line #2 Aging Furnace</td>
<td>---</td>
<td>15.96</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>121H</td>
<td>CALP Line #2 Electrostatic Lubing</td>
<td>159,834 tons/yr</td>
<td>---</td>
<td>None</td>
<td>2017</td>
</tr>
<tr>
<td>123</td>
<td>CALP Line Cooling Tower</td>
<td>7,608 gal/min</td>
<td>---</td>
<td>None</td>
<td>2014</td>
</tr>
</tbody>
</table>

APPLICABLE REGULATIONS:
401 KAR 53:010, Ambient air quality standards, for HF
401 KAR 59:010, New process operations
401 KAR 63:010, Fugitive emissions, applies to EU 120H & 121H

STATE-ORIGIN REQUIREMENT:
401 KAR 63:020, Potentially hazardous matter or toxic substances

NON-APPLICABLE REGULATIONS:
401 KAR 59:015, New indirect heat exchangers, For EU 120A2, 120B, 120E2, 120F1, 120F2, 120G, 121A2, 121B, 121E2, 121F1, 121F2, & 121G: Does not apply because they are direct fired combustion units.
401 KAR 60:005, Section 2(2)(zz), 40 C.F.R. 60.460 to 60.466 (Subpart TT), Standards of Performance for Metal Coil Surface Coating. Does not apply because the lubricants applied can be considered protective oils as no solid film is formed on the surface of the strip. Because this is not considered a coating it is exempt from the requirements of this regulation.
401 KAR 63:002, Section 2(4)(xxx), 40 C.F.R. 63.5080 to 63.5200, Tables 1 to 2 (Subpart SSSS), National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil. Does not apply because the lubricants applied can be considered protective oils as no solid film is formed on the surface of the strip. Because this is not considered a coating it is exempt from the requirements of this regulation.
401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.780 to 63.7575, Tables 1 to 13 (Subpart DDDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. For EU 120A2, 120B, 120E2, 120F1, 120F2, 120G, 121A2, 121B, 121E2, 121F1, 121F2, & 121G: Does not apply because they are direct fired combustion units.
40 CFR 64, Compliance assurance monitoring (CAM). Does not apply because the control devices are not needed to achieve compliance with the applicable emission limit and/or pre-controlled emissions are less than the major source threshold.

PRECLUDED REGULATIONS:
401 KAR 51:017, Prevention of significant deterioration of air quality.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations:
   a. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precautions to prevent particulate matter from becoming airborne. [401 KAR 63:010, Section 3(1)]

   b. If dust, fumes, gases, mist, odororous matter, vapors, or any combination thereof escape from a building or equipment in a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling, and storage are done be tightly closed and ventilated in a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

   c. The permittee shall operate the control devices associated with units 120A1, 121A1, 121D, 120E1, 121E1, 120F1, and 121F1 at all times when the associated unit is operating. [To preclude 401 KAR 51:017]

   d. The permittee shall operate units 120H and 121H such that a transfer efficiency of 99.95% is achieved at all times. [To preclude 401 KAR 51:017]

   Compliance Demonstration Method:
   The permittee shall maintain on-site, and make available for inspection, documentation of a vendor-guaranteed 99.95% transfer efficiency. The permittee shall operate each unit in accordance with the manufacturer’s written instructions at all times.

2. Emission Limitations:
   a. The permittee shall not exceed the group emission limitations specified in the following table, on a rolling 12-month basis: [To preclude 401 KAR 51:017; 401 KAR 53:010]

<table>
<thead>
<tr>
<th>Emission Unit(s)</th>
<th>Unit Name</th>
<th>Pollutant</th>
<th>Emission Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>120A1, 120E1,</td>
<td>CALP Line #1: Alkaline Cleaning Operation, Pickling Operation, Post-Treatment Operation, &amp; Electrostatic Lubing</td>
<td>PM$_{2.5}$</td>
<td>1.74 tpy$^1$</td>
</tr>
<tr>
<td>120F1, &amp;</td>
<td></td>
<td>VOC</td>
<td>4.66 tpy$^1$</td>
</tr>
<tr>
<td>120H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121A1, 121D,</td>
<td>CALP Line #2: Alkaline Cleaning Operation, Tension Leveler, Pickling Operation, Post-Treatment Operation, &amp; Electrostatic Lubing</td>
<td>PM$_{2.5}$</td>
<td>1.86 tpy$^1$</td>
</tr>
<tr>
<td>121E1, 121F1,</td>
<td></td>
<td>VOC</td>
<td>21.16 tpy$^1$</td>
</tr>
<tr>
<td>&amp; 121H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120E1, 120F1,</td>
<td>Pickling Operation and Post-Treatment Operation</td>
<td>HF</td>
<td>0.97 tpy$^2$</td>
</tr>
<tr>
<td>121E1 &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121F1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   $^1$ To preclude 401 KAR 51:017
   $^2$ To ensure compliance with 401 KAR 53:010

   Compliance Demonstration Method:
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Refer to 3. Testing Requirements, 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements. Refer to SECTION D(3) for calculations related to the ton per year limits.

b. **Opacity Standard:** The permittee shall not cause, suffer, allow or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

**Compliance Demonstration Method:**
Refer to 4. Specific Monitoring Requirements (b) and 5. Specific Recordkeeping Requirements (b).

c. **Mass Emission Standard:** The permittee shall not cause, suffer, allow or permit the emission into the open air from a control device or stack associated with any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]

i. For process weights < 0.5 tons/hour: \[ E=2.34 \]
ii. For process weights < 30 tons/hour: \[ E=3.59P^{0.62} \]
iii. For process weights ≥ 30 tons/hour: \[ E=17.31P^{0.16} \]

Where:
- \( E \) is the rate of the emission in lb/hour
- \( P \) is the process weight rate in tons/hour.

**Compliance Demonstration Method:**

i. Results from the tests required by 3. Testing Requirements for units 121D, 120E1, 121E1, 120F1, and 121F1 shall be converted into units of lb/hr and shall be compared to the allowable emission rate determined by 401 KAR 59:010.

ii. For units 120A1, 121A1, 120H, 121H, and 123 the permittee is assumed to be in compliance with the mass emission standard of 401 KAR 59:010 when the units are operated in a manner consistent with good air pollution control practices.

d. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:**

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. **Testing Requirements:**
   a. The permittee shall conduct stack testing for HF and PM on EU 121D, 120E1, 121E1, 120F1, and 121F1 no later than 5 years after the previous stack test and every 5 years thereafter using 40 CFR 51, Appendix M, Method 201A/202 and 40 CFR 60, Appendix A, Method 5 and Method 26A (or an alternate method as approved by the Division). The permittee shall record the control device monitoring parameters for the associated control device during each test.

   b. The permittee shall conduct stack testing for VOC on EU 121D, 121E1, and 121F1 no later than 5 years after the previous stack test and every 5 years thereafter using 40 CFR 60, Appendix A, Method 5 and Method 25A (or an alternate method as approved by the Division). The permittee shall record the control device monitoring parameters for the associated control device during each test.

   c. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. **Specific Monitoring Requirements:**
   a. The permittee shall monitor the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
      ii. Monthly process weight (tons); and
      iii. Monthly natural gas consumption in each unit where combustion occurs.

   b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once every 7 calendar days while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action, which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

   c. The permittee shall monitor, continuously, the volumetric flowrate of each the Wet Droplet Separator Systems serving units 120A1 and 121A1. [401 KAR 52:020, Section 10]

   d. The permittee shall monitor, continuously, the liquid supply pump pressure for the Wet Scrubber Systems serving units 120E1/120F1 and 121E1/121F1. [401 KAR 52:020, Section 10]

   e. Refer to SECTION F for general monitoring requirements.

5. **Specific Recordkeeping Requirements:**
   a. The permittee shall maintain records of the following for each emission unit: [401 KAR 52:020, Section 10]
      i. Monthly hours of operation;
SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. Monthly process weight (tons); and
iii. Monthly natural gas consumption in each unit where combustion occurs.

b. The permittee shall retain records of the qualitative visual observations required by 4. Specific Monitoring Requirements (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

c. The permittee shall maintain records of the volumetric flowrate of each the Wet Droplet Separator Systems serving units 120A1 and 121A1. [401 KAR 52:020, Section 10]

d. The permittee shall maintain records of the liquid supply pump pressure for the Wet Scrubber Systems serving units 120E1/120F1 and 121E1/121F1. [401 KAR 52:020, Section 10]

e. Refer to SECTION F for general recordkeeping requirements.

6. Specific Reporting Requirements:
Refer to SECTION F for general reporting requirements.

7. Specific Control Equipment Operating Conditions:
   a. The permittee shall direct emissions to and operate each control device at all times when the associated unit is operating. [401 KAR 52:020, Section 10]

   b. The permittee shall operate each Wet Scrubber according to the manufacturer’s instructions or good air pollution control practices as approved by the Division. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:
The permittee shall demonstrate, annually, with the records kept in accordance with 5. Specific Recordkeeping Requirements (d), that the liquid supply pump pressure was maintained within the range needed to provide adequate water flow to the scrubber during periods when the emission unit is operating.

c. The permittee shall operate the Carbon Adsorber according to the manufacturer’s instructions or good air pollution control practices as approved by the Division. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:
The permittee shall verify, annually, that the Carbon Adsorber for 121D was maintained according to the manufacturer’s instructions during the reporting period. The permittee shall maintain on-site, and make available for inspection, the manufacturer’s instructions for operation of the Carbon Adsorber.
d. The permittee shall operate the capture devices associated with 121D according to the manufacturer’s written instructions, and such that the hooding systems achieve 100% capture efficiency, at all times. The ID fan setting and any dampers for the Entry and Exit Hood Carbon Adsorber systems shall be retained at the same setting in place at the time of the last performance test. [401 KAR 52:020, Section 10]

**Compliance Demonstration Method:**
The permittee shall certify, annually, that the ID fan settings for the control devices and any stack dampers associated with 121D were kept at the setting in place during the most recent performance demonstration at all times the unit was in operation.

e. Refer to **SECTION E**.
SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<table>
<thead>
<tr>
<th>Description</th>
<th>Generally Applicable Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2 Paintroll grinders</td>
<td>401 KAR 61:020</td>
</tr>
<tr>
<td>2. Welding operations</td>
<td>401 KAR 59:010</td>
</tr>
<tr>
<td></td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>3. Above ground gasoline storage tank(s)</td>
<td>None</td>
</tr>
<tr>
<td>Less than 10,000 gal capacity</td>
<td></td>
</tr>
<tr>
<td>4. Above ground diesel/kerosene storage tank</td>
<td>None</td>
</tr>
<tr>
<td>Tank less than 10,000 gal capacity</td>
<td></td>
</tr>
<tr>
<td>5. Buffing, sanding, and grinding operation</td>
<td>401 KAR 61:020</td>
</tr>
<tr>
<td>6. 550 gallon storage tank</td>
<td>None</td>
</tr>
<tr>
<td>7. Modine hanging heater(s)</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>8. Hot water heaters</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>9. Heat treat furnace (0.6 MMBtu/hr)</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>10. Air make up unit</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>11. Infrared heaters</td>
<td>None</td>
</tr>
<tr>
<td>12. Aqueous cleaner</td>
<td>None</td>
</tr>
<tr>
<td>13. Aging oven</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>14. NCH Cast Pit #1 Vent Stack</td>
<td>401 KAR 61:020</td>
</tr>
<tr>
<td>15. NCH Cast Pit #2 Vent Stack</td>
<td>401 KAR 61:020</td>
</tr>
<tr>
<td>16. NCH &amp; SCH Sow Drying Fire Racks</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>17. Drying Oven</td>
<td>401 KAR 63:020</td>
</tr>
<tr>
<td>18. SCH Casting Pit #1, 2 &amp; 3</td>
<td>401 KAR 61:020</td>
</tr>
</tbody>
</table>
SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

19. SCH Casting Pit #4 401 KAR 61:020
20. SCH Casting Pit #5 401 KAR 61:020
21. Calcium Hydroxide Storage Silos 401 KAR 63:010
22. Mineral spirits storage tanks None
23. Waste mineral spirits storage tanks None
24. Small gas fired space heaters 401 KAR 63:020
25. NCH Dross Press 401 KAR 59:010
26. Two (2) Used Oil Storage Tanks None
27. 640 and 643 Coil Slitters None
28. NCH Two (2) Natural Gas-Fired Crucible Preheat Stations 401 KAR 63:020
29. NCH Natural Gas-Fired Dross Pan Heater 401 KAR 63:020
30. CALP Line #1 Non-Volatile Liquid Storage Tanks None
31. CALP Line #1 Lubricant Storage Tanks None
32. CALP Line #2 Non-Volatile Liquid Storage Tanks None
33. CALP Line #2 Lubricant Storage Tanks None
34. Acid Etch Infrared Curing Oven 401 KAR 59:010 401 KAR 63:020
35. Wastewater Treatment Plant Lime Silo 401 KAR 59:010
36. SCH Sow Preheater 401 KAR 59:010
SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. PM, PM$_{10}$, PM$_{2.5}$, CO, NO$_{X}$, SO$_{2}$, VOC, HF, HCl, D/F and opacity emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. **12-Month Rolling Emission Calculations:**
   a. For each unit subject to a 12-month rolling ton/yr emission limit: At the beginning of each month, the preceding month’s emissions shall be calculated according to the following equation, and every month, a new 12-month rolling total of emissions shall be calculated:

   $$
   E = E_{captured} + E_{uncaptured}
   $$

   $$
   E_{captured} = \frac{PW \times EF}{2,000 (\text{lb/ton})}
   $$

   $$
   E_{uncaptured} = \frac{PW \times EF_{uncontrolled}(1 - %_{capture})(1 - BC)}{2000 (\text{lb/ton})}
   $$

   Note: For calculations for boilers, $E_{uncaptured}$ shall be omitted from the equation

   Where:
   - $E$ = Monthly Emission Rate (tons/month);
   - $PW$ = Monthly Process Rate (SCC unit/month);
   - $EF$ = Emission Factor after Control (lb/SCC unit)
   - $EF_{uncontrolled}$ = Emission Factor before Control (lb/SCC unit)
   - $%_{capture}$ = Capture Efficiency established through methods as approved by the Division verified by ACGIH calculations where required;
   - $BC$ = Building Control Efficiency, where:
     - For PM$_{2.5}$, Building Control = 0%
     - For PM$_{10}$, Building Control = 35%
     - For PM, Building Control = 70%
     - For VOC, Building Control = 0%

   b. The permittee shall calculate emissions using the process rate recorded in (d), below, and emission factors and reduction efficiencies determined through the most recent performance test conducted in accordance with 401 KAR 50:045, or, if testing is not required, the number listed in KyEIS.

   c. The permittee shall maintain records of the 12-month rolling emission totals calculated according to (a), above.
d. The permittee shall maintain records of the 12-month rolling process rate totals for each unit subject to an operational limit.

e. The permittee shall report, semi-annually, the rolling 12-month total of emissions during each month in the semi-annual reporting period.

f. The permittee shall include in the report required by (e), above, the applicable process rates and emission factors used to determine the 12-month rolling emission totals.

g. The permittee shall compare each 12-month rolling emission total in (c), above, and each 12-month rolling process rate total in (d), above, to the applicable emission and process rate limitations, respectively, and clearly identify any exceedances.

4. **SAPU Requirements [40 CFR 63, Subpart RRR]:**

   a. The permittee shall comply with the emission limits calculated using the equations for PM, HCl and HF in 40 CFR 63.1505(k)(1) and (2) for each secondary aluminum processing unit (SAPU). The permittee shall comply with the emission limit calculated using the equation for D/F in 40 CFR 63.1505(k)(3) for each secondary aluminum processing unit (SAPU). [40 CFR 63.1505(k)]

   i. The permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of: [40 CFR 63.1505(k)(1)]

   \[ L_{c_{PM}} = \frac{\sum_{i=1}^{n} (L_{t_{iPM}} \times T_{ti})}{\sum_{i=1}^{n} T_{ti}} \]

   Where:

   \( L_{t_{iPM}} \) = The PM emission limit for individual emission unit i in 40 CFR 63.1505(i)(1) and (2) for a group 1 furnace or in 40 CFR 63.1505(j)(2) for an in-line fluxer;

   \( T_{ti} \) = The mass of feed/charge for 24 hours for individual emission unit i; and

   \( L_{c_{PM}} \) = The daily PM emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour PM emission limit applicable to the SAPU.

   **NOTE:** In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

   ii. The permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl or HF in excess of: [40 CFR 63.1505(k)(2)]

   \[ L_{c_{HCl/HF}} = \frac{\sum_{i=1}^{n} (L_{t_{iHCl/HF}} \times T_{ti})}{\sum_{i=1}^{n} T_{ti}} \]

   Where:

   \( L_{t_{iHCl/HF}} \) = The HCl emission limit for individual emission unit i in 40 CFR 63.1505(i)(4) for a group 1 furnace or in 40 CFR 63.1505(j)(1) for an in-line fluxer; or the HF emission limit for individual emission unit i in 40 CFR 63.1505(i)(4) for an uncontrolled group 1 furnace; and

   \( T_{ti} \) = The mass of feed/charge for 24 hours for individual emission unit i; and
SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

\[ L_{HCi/HF} = \text{The daily HCl or HF emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour HCl or HF emission limit applicable to the SAPU.} \]

**NOTE:** Only uncontrolled group 1 furnaces are included in this HF limit calculation. In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl or HF limit.

iii. The permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of: [40 CFR 63.1505(k)(3)]

\[ L_{D/F} = \frac{\sum_{i=1}^{n} (L_{iD/F} \times T_{ii})}{\sum_{i=1}^{n} T_{ii}} \]

Where:

\[ L_{iD/F} = \text{The D/F emission limit for individual emission unit i in 40 CFR 63.1505(i)(3) for a group 1 furnace; and} \]

\[ T_{ii} = \text{The mass of feed/charge for 24 hours for individual emission unit i; and} \]

\[ L_{D/F} = \text{The daily D/F emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour D/F emission limit applicable to the SAPU.} \]

**NOTE:** Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

iv. The permittee of a SAPU may demonstrate compliance with the emission limits of 40 CFR 63.1505(k)(1) through (3) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of 40 CFR 63.1505(i) and (j). [40 CFR 63.1505(k)(4)]

v. With the prior approval of the Division, the permittee may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of 40 CFR 63, Subpart RRR and will be irreversible. [40 CFR 63.1505(k)(6)]

b. Except as provided in 40 CFR 63.1510(u), the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) for each secondary aluminum processing unit (SAPU) on a daily basis. To calculate the 3-day, 24-hour rolling average, the permittee shall: [40 CFR 63.1510(t)]

i. Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in 40 CFR 63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis. [40 CFR 63.1510(t)(1)]

ii. Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the
SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

performance test) to provide emissions for each emission unit for the 24-hour period, in pounds. [40 CFR 63.1510(t)(2)]

1) Where no performance test has been conducted, for a particular emission unit, because the permittee has, with the approval of the Division, chosen to determine the emission rate of an emission unit by testing a representative unit, in accordance with 40 CFR 63.1511(f), the permittee shall use the emission rate determined from the representative unit in the SAPU emission rate calculation required in 40 CFR 63.1510(t)(4). [40 CFR 63.1510(t)(2)(i)]

2) Except as provided in 40 CFR 63.1510(t)(2)(iii), if the permittee has not conducted performance tests for HCl (and HF for an uncontrolled group 1 furnace) or for HCl for an in-line fluxer, in accordance with the provisions of 40 CFR 63.1512(d)(3), (e)(3), or (h)(2), the calculation required in 40 CFR 63.1510(t)(4) to determine SAPU-wide HCl and HF emissions shall be made under the assumption that all chlorine contained in reactive flux added to the emission unit is emitted as HCl and all fluorine contained in reactive flux added to the emission unit is emitted as HF. [40 CFR 63.1510(t)(2)(ii)]

3) Prior to the date by which the initial performance test for HF emissions from uncontrolled group 1 furnaces is conducted, or is required to be conducted, the calculation required in 40 CFR 63.1505(k) to determine the SAPU-wide HF emission limit and the calculation required in 40 CFR 63.1510(t)(4) to determine the SAPU-wide HF emission rate must exclude HF emissions from untested uncontrolled group 1 furnaces and feed/charge processed in untested uncontrolled group 1 furnaces. [40 CFR 63.1510(t)(2)(iii)]

iii. 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. [40 CFR 63.1510(t)(3)]

iv. Compute the 24-hour daily emission rate using the equation below: [40 CFR 63.1510(t)(4)]

\[
E_{\text{day}} = \frac{\sum_{i=1}^{n} (T_i \times ER_i)}{\sum_{i=1}^{n} T_i}
\]

Where:
- \(E_{\text{day}}\) = The daily PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) emission rate for the secondary aluminum processing unit for the 24-hour period;
- \(T_i\) = The total amount of feed, or aluminum produced, for emission unit \(i\) for the 24-hour period (tons or Mg);
- \(ER_i\) = The measured emission rate for emission unit \(i\) as determined in the performance test (lb/ton or µg/Mg of feed/charge); and
- \(n\) = The number of emission units in the secondary aluminum processing unit.

v. Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3. The SAPU is in compliance with an applicable emission limit if the 3-day, 24-hour rolling average for each pollutant is no greater than the applicable SAPU emission limit determined in accordance with 40 CFR 63.1505(k)(1)-(3). [40 CFR 63.1510(t)(5)]
c. As an alternative to the procedures of 40 CFR 63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit (SAPU) is in compliance with the applicable emission limits for the emission unit. [40 CFR 63.1510(u)]

d. When group 1 furnaces and/or in-line fluxers are included in a single existing SAPU or new SAPU, and the emissions from more than one emission unit within that existing SAPU or new SAPU are manifolded to a single control device, compliance for all units within the SAPU is demonstrated if the total measured emissions from all controlled and uncontrolled units in the SAPU do not exceed the emission limits calculated for that SAPU based on the applicable equation in 40 CFR 63.1505(k). [40 CFR 63.1511(h)]

e. The permittee shall conduct performance tests as described in 40 CFR 63.1512(j)(1) through (3). The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM, HCl and HF and µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t). A performance test is required for: [40 CFR 63.1512(j)]

i. Each group 1 furnace processing only clean charge to measure emissions of PM and either: [40 CFR 63.1512(j)(1)]
   1) Emissions of HF and HCl (for determining the emission limit); or [40 CFR 63.1512(j)(1)(i)]
   2) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). [40 CFR 63.1512(j)(1)(ii)]

ii. Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either: [40 CFR 63.1512(j)(2)]
   1) Emissions of HF and HCl (for determining the emission limit); or [40 CFR 63.1512(j)(2)(i)]
   2) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). [40 CFR 63.1512(j)(2)(ii)]

iii. Each in-line fluxer to measure emissions of PM and HCl. [40 CFR 63.1512(j)(3)]

f. The permittee shall use the procedures in 40 CFR 63.1513(e)(1), (2), and (3) or the procedure in 40 CFR 63.1513(e)(4) to determine compliance with emission limits for a secondary aluminum processing unit. [40 CFR 63.1513(e)]

i. The permittee shall use the following equation to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (ECPM) is less than or equal to the emission limit for the secondary aluminum processing unit (LECPM) calculated using the equation in 40 CFR 63.1505(k)(1). [40 CFR 63.1513(e)(1)]

\[
E_{CPM} = \frac{\sum_{i=1}^{n}(Et_{PM} \times T_{tl})}{\sum_{i=1}^{n} T_{tl}}
\]

Where:

\(E_{CPM}\) = The mass-weighted PM emissions for the secondary aluminum processing unit;
SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

\[ E_{\text{PM}} = \text{Measured PM emissions for individual emission unit, or group of co-controlled emission units, } i; \]

\[ T_i = \text{The average feed rate for individual emission unit } i \text{ during the operating cycle or performance test period, or the sum of the average feed rates for all emission units in the group of co-controlled emission units } i; \text{ and} \]

\[ n = \text{The number of emission units, and groups of co-controlled emission units in the secondary aluminum processing unit.} \]

ii. The permittee shall use the following equation to compute the aluminum mass-weighted HCl or HF emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit \( E_{\text{HCl/HF}} \) is less than or equal to the emission limit for the secondary aluminum processing unit \( L_{\text{HCl/HF}} \) calculated using the equation in 40 CFR 63.1505(k)(2). \[40 \text{ CFR 63.1513(e)(2)}\]

\[ E_{\text{HCl/HF}} = \sum_{i=1}^{n}(E_{ti\text{HCl/HF}} \times T_{ti}) \]

Where:

\[ E_{\text{HCl/HF}} = \text{The mass-weighted HCl or HF emissions for the secondary aluminum processing unit;} \]

\[ E_{ti\text{HCl/HF}} = \text{Measured HCl or HF emissions for individual emission unit, or group of co-controlled emission units, } i; \]

\[ T_{ti} = \text{The average feed rate for individual emission unit } i \text{ during the operating cycle or performance test period, or the sum of the average feed rates for all emission units in the group of co-controlled emission units } i; \text{ and} \]

\[ n = \text{The number of emission units, and groups of co-controlled emission units in the secondary aluminum processing unit.} \]

iii. The permittee shall use the following equation to compute the aluminum mass-weighted D/F emissions for the 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 \( L_{\text{D/F}} \) calculated using the equation in 40 CFR 63.1505(k)(3). \[40 \text{ CFR 63.1513(e)(3)}\]

\[ E_{\text{D/F}} = \sum_{i=1}^{n}(E_{ti\text{D/F}} \times T_{ti}) \]

Where:

\[ E_{\text{D/F}} = \text{The mass-weighted D/F emissions for the secondary aluminum processing unit;} \]

\[ E_{ti\text{D/F}} = \text{Measured D/F emissions for individual emission unit, or group of co-controlled emission units, } i; \]

\[ T_{ti} = \text{The average feed rate for individual emission unit } i \text{ during the operating cycle or performance test period, or the sum of the average feed rates for all emission units in the group of co-controlled emission units } i; \text{ and} \]

\[ n = \text{The number of emission units, and groups of co-controlled emission units in the secondary aluminum processing unit.} \]

iv. As an alternative to using the equations in 40 CFR 63.1513(e)(1), (2), and (3), 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
SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

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). [40 CFR 63.1513(e)(4)]
SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. For EUs 20, 22, 23, & 134:
   a. The permittee shall: [40 CFR 63.1510(d)]
      i. 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 [40 CFR 63.1510(d)(1)]
      ii. 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. This inspection shall include a volumetric flow rate measurement taken at a location in the ductwork downstream of the hoods that is representative of the actual volumetric flow rate without interference due to leaks, ambient air added for cooling or ducts from other hoods. The flow rate measurement must be performed in accordance with 40 CFR 63.1510(d)(2)(i), (ii), or (iii). As an alternative to the flow rate measurement specified in this paragraph, the inspection may satisfy the requirements of this paragraph, including the operating requirements in 40 CFR 63.1506(c), by including permanent total enclosure verification in accordance with 40 CFR 63.1510(d)(2)(i) or (iv). Inspections that fail to successfully demonstrate that the requirements of 40 CFR 63.1506(c) are met, must be followed by repair or adjustment to the system operating conditions and a follow up inspection within 45 days to demonstrate that 40 CFR 63.1506(c) requirements are fully met. [40 CFR 63.1510(d)(2)]
         1) Conduct annual flow rate measurements using U.S. EPA Methods 1 and 2 in 40 CFR 60, Appendix A, or conduct annual verification of a permanent total enclosure using U.S. EPA Method 204; or the permittee may follow one of the three alternate procedures described in 40 CFR 63.1510(d)(2)(ii), (iii), or (iv) to maintain system operations in accordance with an operating limit established during the performance test. The operating limit is determined as the average reading of a parametric monitoring instrument (Magnehelic®, manometer, anemometer, or other parametric monitoring instrument) and technique as described in 40 CFR 63.1510(d)(2)(ii), (iii), and (iv). A deviation, as defined in 40 CFR 63.1510(d)(2)(ii), (iii), and (iv), from the parametric monitoring operating limit requires the permittee to make repairs or adjustments to restore normal operation within 45 days. [40 CFR 63.1510(d)(2)(i)]
         2) As an alternative to annual flow rate measurements using U.S. EPA Methods 1 and 2, measurement with U.S. EPA Methods 1 and 2 can be performed once every 5 years, provided that: [40 CFR 63.1510(d)(2)(ii)]
            A. A flow rate indicator consisting of a pitot tube and differential pressure gauge (Magnehelic®, manometer or other differential pressure gauge) is installed with the pitot tube tip located at a representative point of the duct proximate to the
location of the Methods 1 and 2 measurement site; and [40 CFR 63.1510(d)(2)(ii)(A)]

B. The flow rate indicator is installed and operated in accordance with the manufacturer's specifications; and [40 CFR 63.1510(d)(2)(ii)(B)]

C. The differential pressure is recorded during the Method 2 performance test series; and [40 CFR 63.1510(d)(2)(ii)(C)]

D. Daily differential pressure readings are made by taking three measurements with at least 5 minutes between each measurement and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average pressure differential indicated by the flow rate indicator during the most recent Method 2 performance test series; and [40 CFR 63.1510(d)(2)(ii)(D)]

E. An inspection of the pitot tube and associated lines for damage, plugging, leakage and operational integrity is conducted at least once per year; or [40 CFR 63.1510(d)(2)(ii)(E)]

3) As an alternative to annual flow rate measurements using EPA Methods 1 and 2, measurement with EPA Methods 1 and 2 can be performed once every 5 years, provided that: [40 CFR 63.1510(d)(2)(iii)]

A. Daily measurements of the capture and collection system's fan revolutions per minute (RPM) or fan motor amperage (amps) are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average RPM or amps measured during the most recent Method 2 performance test series; or [40 CFR 63.1510(d)(2)(iii)(A)]

B. A static pressure measurement device is installed in the duct immediately downstream of the hood exit, and daily pressure readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or better of the average vacuum recorded during the most recent Method 2 performance test series; or [40 CFR 63.1510(d)(2)(iii)(B)]

C. A hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple and automated data logging software and associated hardware is installed; and daily readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series; or [40 CFR 63.1510(d)(2)(iii)(C)]

D. For booth-type hoods, hotwire anemometer measurements of hood face velocity are performed simultaneously with U.S. EPA Method 1 and 2 measurements, and the annual hood face velocity measurements confirm that the enclosure draft is maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series. Daily readings are made by taking three measurements with at least 5 minutes between each measurement,
SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS (CONTINUED)

and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 1 and 2 performance test series. [40 CFR 63.1510(d)(2)(iii)(D)]

4) As an alternative to the annual verification of a permanent total enclosure using U.S. EPA Method 204, verification can be performed once every 5 years, provided that: [40 CFR 63.1510(d)(2)(iv)]
   A. Negative pressure in the enclosure is directly monitored by a pressure indicator installed at a representative location; [40 CFR 63.1510(d)(2)(iv)(A)]
   B. Pressure readings are recorded daily or the system is interlocked to halt material feed should the system not operate under negative pressure; [40 CFR 63.1510(d)(2)(iv)(B)]
   C. An inspection of the pressure indicator for damage and operational integrity is conducted at least once per calendar year. [40 CFR 63.1510(d)(2)(iv)(C)]
SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit;
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported
SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
   a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
   b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
   c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
SECTION F - MONITORING, RECORDKEEPING, AND RECORDING REQUIREMENTS (CONTINUED)

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality          U.S. EPA Region 4
Owensboro Regional Office        Air Enforcement Branch
3032 Alvey Park Drive W., Suite 700 Atlanta Federal Center
Owensboro, KY 42303-2191          61 Forsyth St.

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.
SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements
   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a-7 and 8 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)]
SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1].
SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
   (1) Applicable requirements that are included and specifically identified in this permit; and
   (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements
a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions
a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements
Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units 01A and 134 in accordance with the terms and conditions of the permit (V-20-032 R2).
SECTION G - GENERAL PROVISIONS (CONTINUED)

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit (V-20-032 R2).

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit (V-20-032 R2) whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
   (1) The date when construction commenced.
   (2) The date of start-up of the affected facilities listed in this permit.
   (3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit (V-20-032 R2) or those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall-demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit (V-20-032 R2) established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements
a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format
SECTION G - GENERAL PROVISIONS (CONTINUED)

approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source’s operations and create the highest rate of emissions. If [When] the maximum production rate represents a source’s highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements
a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;
   (2) The permitted facility was at the time being properly operated;
   (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
SECTION G - GENERAL PROVISIONS (CONTINUED)

(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.

(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.

(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.


a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.
SECTION H – ALTERNATE OPERATING SCENARIOS

None.

SECTION I - COMPLIANCE SCHEDULE

N/A
APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLANS
# APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN

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APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

1. INTRODUCTION

As part of the Title V renewal process, Commonwealth Rolled Products has evaluated the applicability of the Compliance Assurance Monitoring (CAM) rule, established in 40 CFR part 64, and promulgated on November 21, 1997. Under the CAM regulations, facilities are required to prepare and submit monitoring plans for emission units to provide on-going and reasonable assurance of compliance with emission limitations. Based on the complete CAM applicability analysis presented in section 1.1 below, the following emission units at the Hancock facility are subject to the CAM rule;

591 Wide-Sheet Cold Rolling Mills (EU 119)

The CAM plan for this emission unit drafted in accordance with all applicable provisions of 40 CFR Part 64 and based on the U.S. EPA CAM technical guidance document is provided in Section 2.

1.1 CAM APPLICABILITY

1.1.1 CAM APPLICABILITY CRITERIA

Pursuant to 40 CFR 64.2(a), the CAM regulations apply to a pollutant specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major Title V source if the PSEU:

1. Is subject to an emission limitation or standard for the regulated pollutant, other than an emission limitation or standard that is exempt under 40 CFR 64.2(b);
2. Uses a control device as defined in 40 CFR 64.1 to achieve compliance with the emission limitation; and
3. Has potential pre-controlled emissions of the applicable regulated air pollutant that are equal to or greater than the Title V major source threshold.

1.1.2 CAM APPLICABILITY EXEMPTIONS

The CAM regulations specifically exempt certain emission limits from being considered for CAM applicability. Specifically, limits or standards proposed by U.S. EPA after November 15, 1990, pursuant to section 111 and section 112 of the Clean Air Act are exempted. Emission limits for which “a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1” are also exempt. Per 40 CFR 64.1, the definition of a continuous compliance determination method is:

... a method, specified by the applicable standard or an applicable permit condition, which (1) is used to determine compliance with an emission limitation or standard on a continuous compliance basis, consistent with the averaging period established for the emission limitation or standard; and (2) provides data either in units of the standard or correlated directly with the compliance limit
APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

1.1.3 CAM Applicability Determination

For the CAM applicability determination, all emission units at the facility were first reviewed to identify those, which rely on control devices to achieve compliance with an emission limitation or standard. The potential pre-controlled emissions for the identified units were then compared to the Title V major source thresholds for the Hancock plant, 100 tpy of any regulated pollutant, 10 tpy of an individual HAP, and 25 tpy of combined HAPs. Per 40 CFR 64.2(a)(3), potential pre-control device emissions was interpreted to have the same meaning as “potential-to-emit”, as defined in 64.1, except that emission reductions achieved by the applicable control device were not taken into account. For any units with pre-controlled potential emissions exceeding 100 tpy, the list of potential exemptions identified in Sections 1.1.2 were then reviewed and applied as necessary.

The following emission units at the Hancock plant, which use control devices to comply with emission limitations, are subject to the CAM rule for the reasons cited:

- **591 Wide-Sheet Cold Rolling Mills (EU 119):** The wide-sheet cold rolling mills use a heavy oil scrubbing (HOS) system to achieve compliance with VOC emission limitations from 401 KAR 51:017, the PSD avoidance limit for VOC. The pre-controlled potential emissions of VOC is greater than the 100 tpy limit. However since post-controlled VOC emissions are less than the major source threshold, 591 cold mill is designated as a small PSEU under CAM regulations.

1.2 CAM Plan Requirements

To provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range or operations at a PSEU, the CAM plan submittal must:

1. Identify the control device monitoring approach;
2. Identify the indicator range or value to be maintained; and
3. Provide the rationale for selecting the monitoring approach and the indicator range or value.

The control device monitoring procedures outlined the CAM plans that follow, are existing procedures currently implemented at the Hancock plant. Federally enforceable permit conditions that require CRP to conduct these procedures in accordance with control device manufacturer’s specifications.
APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

2. CAM Plan – 591 Wide-Sheet Cold Rolling Mills

2.1 CAM Background

2.1.1 Emission Unit

Description: Reduces the thickness of coarse gauge coils from the hot mill, into a customer specified thickness.

Identification: EU 119

Facility: Commonwealth Rolled Products, Inc. in Hancock, Kentucky

2.1.2 Applicable Regulations, Emission Limitations, and Monitoring Requirements

Regulation: To preclude 401 KAR 51:017 for VOC

Emission Limit: Monthly of hours of operation

Current Monitoring Requirements: Monthly and 12-Month rolling process weight rate

Volumetric flow rate of the exhaust gas stream of each HOS

2.1.3 Control Technology

A fume exhaust capture system and HOS system provides control for PM and VOC emissions from roll coolant droplet entrainment and evaporative losses. The control process occurs in two steps. Firstly, coolant is entrained in the exhaust flow and is absorbed by washing oil. The second process is a vacuum distillation section, in which absorbed coolant separates from the washing oil for recycle and reuse in the rolling process.

2.2 Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are summarized in the Table 2-1.
## APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>HOS system exhaust gas flowrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurements Approach</td>
<td>A calibrated optical flow sensor (OFS) in the HOS duct continuously measure the exhaust flowrate.</td>
</tr>
</tbody>
</table>

### Indicator Range

> **75,500 acfm, per coil average**

An excursion is defined as an average flow rate reading that is less than the indicator range during. The average is based on data collected during the time each coil is processed. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement.

### Performance Criteria

#### Data Representatives
The OFS have a minimum accuracy of ± 0.1 m/s or ± 2% of the reading, whichever is greater.

#### Verification of Operational Status
The OFS reading is displayed on the operator’s control screen. The system continuously monitors the exhaust flow and alarms if it falls outside the indicator range.

#### QA/QC Practices and Criteria
Preventative maintenance inspection are conducted monthly that include cleaning and checking of the monitoring equipment.

#### QIP Threshold
CRP will develop a quality improvement plan (QIP) if the percentage of excursions in semiannual reporting period exceeds 5%.

#### Monitoring Frequency and Data Collection Procedures
**Continuously:** The exhaust flowrate is monitored continuously via the OFS. The programmable logic controller (PLC) is programmed to calculate and record the average flowrate for each coil processed. Multiple coils are processed per hour.

#### Means of Identifying Excursion
The continuous monitoring system provides an alarm notification to operators if the flowrate reading falls outside the indicator range.

#### Corrective Action
In response to an excursion, appropriate personnel will troubleshoot the HOS exhaust fan and system and conduct repairs or maintenance as deemed necessary. Corrective actions will be documented in the plant’s maintenance tracking system.

#### Recordkeeping
Electronic archives of per-coil average exhaust flow readings, Causes and corrective actions taken associated with any excursions, noted in the maintenance log.

#### Reporting
Excursion will be summarized in the Title V semiannual monitoring reports.
## APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measurement Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>HOS System Washing Oil Absorption Column Level</td>
</tr>
<tr>
<td>Measurements Approach</td>
<td>The absorption column is equipped with a Wika USA, Model BNA-25 level gauge that directly monitors the absorption column liquid level in a bypass chamber.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator Range</th>
<th>20-85%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>An excursion will be defined as a 3-hour average absorption column level reading outside the indicator range during periods when the HOS is in operation. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Representatives</td>
<td>The float in the bypass chamber of the level gauge has a built-in permanent magnetic system which is mounted in the bypass chamber and transmits the liquid level of the absorption column, contact-free, to the magnetic display mounted on the outside of the bypass chamber. Through the magnetic field of the permanent magnetic system in the float of the level gauge, colored display rollers also turn changing from red (low level) to white (high level) providing an additional color indication of the level.</td>
</tr>
<tr>
<td>Verification of Operational Status</td>
<td>The absorption column washing oil level indicator reading is displayed on the operator’s control screen. The system continuously monitors the level and will be set to alarm if it falls outside the indicator range.</td>
</tr>
<tr>
<td>QA/QC Practices and Criteria</td>
<td>Preventative maintenance inspections will be conducted monthly that include cleaning and checking of the monitoring instruments.</td>
</tr>
<tr>
<td>QIP Threshold</td>
<td>CRP will develop a quality improvement plan (QIP) if the percentage of excursions in a semiannual reporting period exceeds 5%.</td>
</tr>
<tr>
<td>Monitoring Frequency and Data Collection Procedures</td>
<td><strong>Continuously:</strong> The absorption column washing oil level indicator will be monitored continuously and at least one data point will be electronically saved every 15 minutes when the system is in operation. The programmable logic controller (PLC) will be programmed to calculate and record the 3-hour average.</td>
</tr>
</tbody>
</table>
### APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

<table>
<thead>
<tr>
<th>Means of Identifying Excursion</th>
<th>The continuous monitoring system will provide an alarm notification to operators if the column level reading falls outside the indicator range.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective Action</td>
<td>In response to an excursion, appropriate personnel will troubleshoot the HOS system absorber and conduct repairs or maintenance as deemed necessary. Corrective actions will be documented in the plant’s maintenance tracking system.</td>
</tr>
<tr>
<td>Recordkeeping</td>
<td>Electronic Archives of absorption column level readings. Causes and corrective actions taken associated with any excursions, noted in the maintenance log.</td>
</tr>
<tr>
<td>Reporting</td>
<td>Excursions will be summarized in Title V semiannual monitoring reports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator</th>
<th>HOS System Washing Oil Temperature at Absorber Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>The absorption column is equipped with an Endress+Hauser thermometer (Model Omnigrad M TR13) in the return line from the washing oil cooler before entering the absorber with settings for determining if the temperature is too low or too high.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator Range</th>
<th>30-45°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>An excursion will be defined as a 3-hour average temperature reading outside the indicator range during periods when the HOS is in operation. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement.</td>
<td></td>
</tr>
</tbody>
</table>

| Performance Criteria | Data Representatives | The Omnigrad M TR13 industrial thermometer uses resistance temperature detector (RTD) principles and fulfills the IEC 60751 accuracy class A standard. The thermometer has a measuring range of -200 to +600°C and provides high measurement accuracy (± 0.15°C) and long-term stability |

| Verification of Operational Status | The temperature reading is displayed on the operator’s control screen. The system continuously monitors the temperature and will be set to alarm if it falls outside the indicator range. |

| QA/QC Practices and Criteria | Preventative maintenance inspections will be conducted monthly that include cleaning and checking of the monitoring instruments. |
### APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

<table>
<thead>
<tr>
<th>QIP Threshold</th>
<th>CRP will develop a quality improvement plan (QIP) if the percentage of excursions in a semiannual reporting period exceeds 5%.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring Frequency and Data Collection Procedures</td>
<td><strong>Continuously</strong> The washing oil inlet temperature will be monitored continuously and at least one data point will be electronically saved every 15 minutes when the system is in operation. The programmable logic controller (PLC) will be programmed to calculate and record the 3-hour average.</td>
</tr>
<tr>
<td>Means of Identifying Excursion</td>
<td>The continuous monitoring system will provide an alarm notification to operators if the temperature reading falls outside the indicator range.</td>
</tr>
<tr>
<td>Corrective Action</td>
<td>In response to an excursion, appropriate personnel will troubleshoot the HOS system absorber and conduct repairs or maintenance as deemed necessary. Corrective actions will be documented in the plant’s maintenance tracking system.</td>
</tr>
<tr>
<td>Recordkeeping</td>
<td>Electronic archives of temperature readings. Causes and corrective actions taken associated with any excursions, noted in the maintenance log.</td>
</tr>
<tr>
<td>Reporting</td>
<td>Excursions will be summarized in Title V semiannual monitoring reports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Parameter</th>
<th>HOS System Stripping Column Vacuum Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurements Approach</td>
<td>The suction lines for the vacuum stations are equipped with Endress+Hauser pressure sensors (Model Cerabar PMC51) with feedback control to the vacuum pumps</td>
<td></td>
</tr>
</tbody>
</table>

| Indicator Range         | **0.5-10 mbar** An excursion will be defined as a 3-hour average pressure reading outside the indicator range during periods when the rectification system is in operation. An excursion will trigger an investigation of the occurrence, corrective action, and a reporting requirement. |

| Performance Criteria | Data Representatives | The PMC51 digital pressure transmitter has a capacitive oil-free ceramic measuring cell with a minimum accuracy of ±0.15%. |
APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

| Verification of Operational Status | The pressure reading is displayed on the operator’s control screen. The system continuously monitors the pressure and will be set to alarm if it falls outside the indicator range. |
| QA/QC Practices and Criteria       | Preventative maintenance inspections will be conducted monthly that include cleaning and checking of the monitoring instruments. |
| QIP Threshold                      | CRP will develop a quality improvement plan (QIP) if the percentage of excursions in a semiannual reporting period exceeds 5%. |
| Monitoring Frequency and Data Collection Procedures | Continuously The pressure in the suction lines for the vacuum stations will be monitored continuously and at least one data point will be electronically saved every 15 minutes when the system is in operation. The programmable logic controller (PLC) will be programmed to calculate and record the 3-hour average. |
| Means of Identifying Excursion     | The continuous monitoring system will provide an alarm notification to operators if the vacuum pressure reading falls outside the indicator range. |
| Corrective Action                  | In response to an excursion, appropriate personnel will troubleshoot the HOS system stripping column and conduct repairs or maintenance as deemed necessary. Corrective actions will be documented in the plant’s maintenance tracking system. |
| Recordkeeping                      | Electronic archives of temperature readings. Causes and corrective actions taken associated with any excursions, noted in the maintenance log. |
| Reporting                          | Excursions will be summarized in Title V semiannual monitoring reports. |

2.3 MONITORING APPROACH JUSTIFICATION

A mineral oil-based lubricant/coolant is applied to the work rolls and coil as it undergoes thickness reduction(s). The lubricant is applied at a controlled flow rate to the entry side of the aluminum sheet/work roll interfaces. Although this rolling oil serves several functions, its primary function is to remove heat generated from the compression of the aluminum sheet and to prevent sticking of the sheet to the steel work rolls. Based on this function rolling oils is commonly referred to as “roll coolant”. The roll coolant application rate is primarily dependent on the line speed and product specifications. The recycling process is used to recover and re-circulate nearly all of the roll coolant applied at each mill. Most of the roll coolant is collected in a large mill pan located beneath the lower backup roll of the cold mill stand. Roll coolant leaving the mill pan is routed via the mill sump to the storage and processing area for subsequent recycling to the cold mill spray system. Despite the efficiency of the roll coolant collection and recycling system, a small portion of the roll coolant applied becomes entrained in the air as mist and vapor, primarily through the mechanical action and heat generated at the aluminum sheet/work roll contact point. The outlet exhaust stream is routed to dedicated stack with a height of 92.7 ft, and a diameter of 5.67 ft.
APPENDIX A – COMPLIANCE ASSURANCE MONITORING PLAN (CONTINUED)

2.3.1  **Rationale for Selecting Performance Indicators**
An OFS continuously measures the exhaust flowrate in the HOS inlet duct to ensure that VOC laden aerosols and gas captured in the hooding system and is routed to the HOS for control. VOC is controlled by the absorption tower through the packing media of the tower creating intimate liquid-liquid and liquid-vapor contact between the coolant entrained in the exhaust gas and the washing oil. The absorption tower level indicator provides a feedback control to the washing oil delivery pump and washing oil return pump to maintain a relatively constant recirculating washing oil flow rate through the HOS. Keeping the absorption tower above the minimum washing oil level ensures sufficient washing oil is flowing counter current to the exhaust gas. The scrubbing liquid temperature is monitored to ensure proper scrubber control performance. If the temperature is too low, the washing oil becomes overly viscous with insufficient flow through the column, reducing potential control. Too high of a temperature reduces the potential for absorption of roll coolant. Vacuum pressure is a key determinant in the quality of the distillation separating the heavier washing oil from the lighter rolling oil in the stripping column. It determines the overall “cleanliness” of the washing oil recirculating to the absorption.

2.3.2  **Rationale for Selecting Indicator Range**
The indicator range for the exhaust flow rate was selected because a capture efficiency analysis demonstrated that the capture system is expected to achieve at least 90% capture efficiency, when the average volumetric flowrate is maintained at or above 75,500 acfm. Airwash System Operating Instruction specify recommended warning alarm set points for the column level sensor for less than 20%(insufficient washing oil) and over 85%(column overfills). During a performance test conducted in August 2018, the washing oil inlet temperature ranged from 38 to 41 °C provided >90% VOC control. Based on information on recommended temperatures, and the performance test, a target temperature operating range of 20-45 °C is used. The Airwash System Operating Instructions recommends a 3 mbar set point for the pressure control with a high pressure warning alarm at greater than 10 mbar and low pressure as un