

CLASS I AIR QUALITY PERMIT

PERMIT No. 106233

PERMITTEE: Aluminum Dynamics, Inc.
FACILITY: Aluminum Dynamics
PLACE ID: 245437
DATE ISSUED: February 18, 2026
EXPIRY DATE: February 17, 2031

SUMMARY

This Class I air quality permit is issued to Aluminum Dynamics, Inc., the Permittee, for the operation of its recycled aluminum ingot casting center. The facility is located at 31° 57' 33.8" N, 110° 16' 56.4" W, Benson, Arizona in Cochise County.

The facility's pre-control potential to emit (PTE) emissions are greater than the major source thresholds identified in Arizona Administrative Code (A.A.C.) R18-2-101.75 for hazardous air pollutants (HAPs). Therefore, a Class I permit is required for this facility in accordance with A.A.C. R18-2-302.B.1.a.

This permit is issued in accordance with Arizona Revised Statutes (A.R.S.) § 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and Title 40 of the Code of Federal Regulations (CFR), except as otherwise defined in this permit.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

- A.** This permit is valid for a period of five (5) years from the date of issuance.
[A.R.S. § 49-426.F, A.A.C. R18-2-306.A.1]
- B.** The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.
[A.A.C. R18-2-304.D.2]

II. COMPLIANCE WITH PERMIT CONDITIONS

- A.** The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
[A.A.C. R18-2-306.A.8.a]
- B.** It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
[A.A.C. R18-2-306.A.8.b]

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

- A.** The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[A.A.C. R18-2-306.A.8.c]
- B.** The permit shall be reopened and revised under any of the following circumstances:
1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term;
[A.A.C. R18-2-321.A.1.a]

IV. POSTING OF PERMIT

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit;
[A.A.C. R18-2-321.A.1.b]
 3. The Director or the Administrator 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; and
[A.A.C. R18-2-321.A.1.c]
 4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
[A.A.C. R18-2-321.A.1.d]
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.
[A.A.C. R18-2-321.A.2]

IV. POSTING OF PERMIT

- A. The Permittee shall post this permit or a certificate of permit issuance at the facility in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:
[A.A.C. R18-2-315.A]
1. Current permit number; or
 2. Serial number or other equipment identification number (equipment ID number) that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on site.
[A.A.C. R18-2-315.B]

V. FEE PAYMENT

The Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.
[A.A.C. R18-2-306.A.9 and -326]

VI. EMISSIONS INVENTORY QUESTIONNAIRE

- A. The Permittee shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 of each year.
[A.A.C. R18-2-327.A.1.a]

- B.** The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the information required by A.A.C. R18-2-327.A.3 for the previous calendar year.

[A.A.C. R18-2-327.A.3]

- C.** The Permittee shall submit to the Director an amendment to an emissions inventory questionnaire, containing the documentation required by A.A.C. R18-2-327.A.3, whenever the Permittee discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment shall not subject the Permittee to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.

[A.A.C. R18-2-327.A.4]

VII. COMPLIANCE CERTIFICATION

- A.** The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year.

[A.A.C. R18-2-309.2.a]

- B.** The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

[A.A.C. R18-2-309.2.c.i]

2. The identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. The methods and other means shall include, at a minimum, the methods and means required under R18-2-306(A)(3). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

[A.A.C. R18-2-309.2.c.ii]

3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XI.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification;

[A.A.C. R18-2-309.2.c.iii]

4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;

[A.A.C. R18-2-309.2.c.iii]

5. Other facts the Director may require to determine the compliance status of the source.

[A.A.C. R18-2-309.2.c.iv]

- C. A copy of all compliance certifications shall also be submitted to the EPA Administrator.
[A.A.C. R18-2-309.2.d]

- D. If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above. The progress reports shall contain the information required by A.A.C. R18-2-309.5.d.

[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[A.A.C. R18-2-309.3]

IX. INSPECTION AND ENTRY

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.a]

- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.b]

- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

[A.A.C. R18-2-309.4.c]

- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[A.A.C. R18-2-309.4.d]

- E. Record any inspection by use of written, electronic, magnetic and photographic media.

[A.A.C. R18-2-309.4.e]

X. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

[40 CFR Part 68]

XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

1. Excess emissions shall be reported as follows:

a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

[A.A.C. R18-2-310.01.A]

(1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b below.

[A.A.C. R18-2-310.01.A.1]

(2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a(1) above.

[A.A.C. R18-2-310.01.A.2]

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred;

[A.A.C. R18-2-310.01.B.1]

(2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

[A.A.C. R18-2-310.01.B.2]

(3) Time and duration, or expected duration, of the excess emissions;

[A.A.C. R18-2-310.01.B.3]

(4) Identity of the equipment from which the excess emissions emanated;

[A.A.C. R18-2-310.01.B.4]

(5) Nature and cause of such emissions;

[A.A.C. R18-2-310.01.B.5]

XII. RECORDKEEPING REQUIREMENTS

- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
 [A.A.C. R18-2-310.01.B.6]
 - (7) Steps that were or are being taken to limit the excess emissions; and
 [A.A.C. R18-2-310.01.B.7]
 - (8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.
 [A.A.C. R18-2-310.01.B.8]
2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XI.A.1 above.
 [A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

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. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

[A.A.C. R18-2-306.A.5.b]

1. Notice that complies with Condition XI.A.1 above is prompt for deviations that constitute excess emissions;
 [A.A.C. R18-2-306.A.5.b.i]
2. Notice that is submitted within two (2) working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.B.1 of Attachment “B”;
 [A.A.C. R18-2-306.A.5.b.ii]
3. Except as provided in Conditions XI.B.1 and 2 above, prompt notification of all other types of deviations shall be every 6 months, concurrent with the semiannual compliance certifications required in Section VII, and can be submitted via myDEQ, the Arizona Department of Environmental Quality’s online portal.
 [A.A.C. R18-2-306.A.5.b.ii]

XII. RECORDKEEPING REQUIREMENTS

- A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:
- [A.A.C. R18-2-306.A.4.a]
1. The date, place as defined in the permit, and time of sampling or measurements;
[A.A.C. R18-2-306.A.4.a.i]
 2. The date(s) any analyses were performed;
[A.A.C. R18-2-306.A.4.a.ii]
 3. The name of the company or entity that performed the analyses;
[A.A.C. R18-2-306.A.4.a.iii]
 4. A description of the analytical techniques or methods used;
[A.A.C. R18-2-306.A.4.a.iv]
 5. The results of analyses; and
[A.A.C. R18-2-306.A.4.a.v]
 6. The operating conditions as existing at the time of sampling or measurement.
[A.A.C. R18-2-306.A.4.a.vi]
- B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[A.A.C. R18-2-306.A.4.b]

XIII. REPORTING REQUIREMENTS

- A. The Permittee shall submit the following reports:
- B. Compliance certifications in accordance with Section VII above.
[A.A.C. R18-2-306.A.5.a]
- C. Excess emission; permit deviation, and emergency reports in accordance with Section XI above.
[A.A.C. R18-2-306.A.5.b]
- D. Other reports required by any condition of Attachment “B”.
[A.A.C. R18-2-306.A.5.a]

XIV. DUTY TO PROVIDE INFORMATION

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

[A.A.C. R18-2-304.G and -306.A.8.e]

- B.** If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

[A.A.C. R18-2-304.H]

XV. PERMIT AMENDMENT OR REVISION

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI below, as follows:

- A.** Administrative Permit Amendment;

[A.A.C. R18-2-318]

- B.** Minor Permit Revision; and

[A.A.C. R18-2-319]

- C.** Significant Permit Revision

[A.A.C. R18-2-320]

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION

- A.** The Permittee may make changes that contravene an express permit term without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(24);

[A.A.C. R18-2-317.A.1]

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;

[A.A.C. R18-2-317.A.2]

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;

[A.A.C. R18-2-317.A.3]

4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A;

[A.A.C. R18-2-317.A.4]

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements; and

[A.A.C. R18-2-317.A.5]

6. The changes do not constitute a minor NSR modification.

[A.A.C. R18-2-317.A.6]

- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVI.A, C, and D of this Attachment.

[A.A.C. R18-2-317.B]

- C.** For each change under Conditions XVI.A and XVI.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.

[A.A.C. R18-2-317.D]

- D.** Each notification shall include:

1. When the proposed change will occur; [A.A.C. R18-2-317.E.1]
2. A description of the change; [A.A.C. R18-2-317.E.2]
3. Any change in emissions of regulated air pollutants; and [A.A.C. R18-2-317.E.3]
4. Any permit term or condition that is no longer applicable as a result of the change. [A.A.C. R18-2-317.E.7]

- E.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section XVI.

[A.A.C. R18-2-317.F]

- F.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section XVI.

[A.A.C. R18-2-317.G]

- G.** Notwithstanding any other part of Section XVI, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under Section XVI over the term of the permit, do not satisfy Condition XVI.A above.

[A.A.C. R18-2-319.I]

XVII. TESTING REQUIREMENTS

- A.** Except as provided in Condition XVII.F below, the Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

[A.A.C. R18-2-312.A]

B. Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[A.A.C. R18-2-312.C]

C. Performance Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

[A.A.C. R18-2-312.B]

D. Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

[A.A.C. R18-2-312.B and D]

1. Test duration;
2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

[A.A.C. R18-2-312.E]

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);
3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that

a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

[A.A.C. R18-2-312.F]

G. Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 60 or 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the completion of the testing as specified in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

[A.A.C. R18-2-312.A and B]

H. Extension of Performance Test Deadline

For performance testing required under Condition XVII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

[A.A.C. R18-2-312.J]

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.

[A.A.C. R18-2-312.J.2]

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify

the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVII.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVII, a “force majeure event” means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

XVIII. PROPERTY RIGHTS

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

[A.A.C. R18-2-306.A.8.d]

XIX. SEVERABILITY CLAUSE

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

[A.A.C. R18-2-306.A.7]

XX. PERMIT SHIELD

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled “Permit Shield”. The permit shield shall not apply to minor revisions pursuant to Condition XV.B of this Attachment and any facility changes without a permit revision pursuant to Condition XVI of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

XXI. PROTECTION OF STRATOSPHERIC OZONE

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

[40 CFR Part 82]

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulations.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]

ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Opacity

1. Instantaneous Surveys and Six-Minute Observations

a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by an EPA Reference Method 9 Certified Observer.

[A.A.C. R18-2-311.B and A.A.C. R18-2-306.A.3.c]

b. Six-Minute Observations

Any six-minute observation required by this permit shall be determined by EPA Reference Method 9.

[A.A.C. R18-2-311.B]

c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring, Recordkeeping, and Reporting Requirements

[A.A.C. R18-2-306.A.3.c]

a. At the frequency and on the sources specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.

b. If the visible emissions on an instantaneous basis appear less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.

c. If the visible emissions on an instantaneous basis appear greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.

(1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.

(2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:

I. FACILITY-WIDE REQUIREMENTS

- (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
- (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
- (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
- (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

B. Recordkeeping and Reporting Requirements

1. Deviations from the following Attachment "B" permit conditions shall be promptly reported in accordance with Condition XI.B.2 of Attachment "A":
[A.A.C. R18-2-306.A.5.b]
 - a. Condition II.C.2 of Attachment "B";
 - b. Condition II.D.2 of Attachment "B"
 - c. Condition II.I.3.e of Attachment "B";
 - d. Condition III.B.2 of Attachment "B";
 - e. Condition VI.B.2.a of Attachment "B"; and
 - f. Condition VI.B.2.b of Attachment "B".
2. The Permittee shall maintain, on-site, records of the manufacturer supplied operations and maintenance instructions or Operation and Maintenance Plan for minimizing emissions for all equipment identified in Attachment "C".
[A.A.C. R18-2-306.A.3.c]
3. The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the semiannual compliance certifications required by Section VII of Attachment "A."
[A.A.C. R18-2-306.A.5.a]

C. Nothing in this permit shall alter or affect the following:

[A.A.C. R18-2-325.B]

1. The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the EPA Administrator under that Section;
2. The liability of the facility for any violation of applicable requirements prior to or at the time of permit issuance;

3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act;
 4. The ability of the EPA Administrator or the Director to obtain information from the facility pursuant to Section 114 of the Clean Air Act, or any provision of state law; and
 5. The authority of the Director to require compliance with new applicable requirements adopted after the permit is issued.
- D.** Within 90 days of the construction completion date and prior to the initial start-up of each process unit, the Permittee shall submit a report along with as-built drawings to confirm that each process unit and associated control equipment, as applicable, were constructed in accordance with the representations in the application and modeling report submitted to the Department. Each submission must include a certification of truth, accuracy, and completeness pursuant to A.A.C. R18-2-304(I).

[A.A.C. R18-2-306.A.8.e]

II. SECONDARY ALUMINUM PROCESSING EQUIPMENT REQUIREMENTS

A. Applicability

The Section applies to the secondary aluminum production equipment subject to 40 CFR 63 Subpart RRR as listed in equipment list in Attachment "C".

B. Monitoring, Recordkeeping and Reporting Requirements

1. The Permittee shall install, calibrate, operate and maintain a device that measures and records or otherwise determines the weight of feed/charge (or throughput) on a process unit-by-process unit basis.
[A.A.C. R18-2-306.A.3.c]
2. The Permittee shall record the weight of feed/charge of each process unit for each operating cycle.
[A.A.C. R18-2-306.A.3.c]
3. At the end of each calendar month, the Permittee shall calculate and record the monthly weight of feed/charge of each process unit.
[A.A.C. R18-2-306.A.3.c]
4. The Permittee shall record the monthly natural gas usage of each process unit.
[A.A.C. R18-2-306.A.3.c]

C. Particulate Matter and Opacity

1. Emissions Limitations and Standards
 - a. The Permittee shall limit the emissions of PM₁₀ to 0.79 pounds per hour and PM_{2.5} to 0.23 pounds per hour from the Cold Baghouse #1.
[A.A.C. R18-2-334.C.2]

- b. The Permittee shall limit the emissions of PM₁₀ to 5.07 pounds per hour and PM_{2.5} to 4.94 pounds per hour from the Hot Baghouse #1.
[A.A.C. R18-2-334.C.2]
- c. The Permittee shall limit the emissions of PM₁₀ to 2.70 pounds per hour and PM_{2.5} to 2.28 pounds per hour from the Hot Baghouse #2.
[A.A.C. R18-2-334.C.2]
- d. The Permittee shall limit the emissions of PM₁₀ to 3.64 pounds per hour and PM_{2.5} to 3.10 pounds per hour from the Hot Baghouse #3.
[A.A.C. R18-2-334.C.2]
- e. The Permittee shall not cause, allow or permit the emission of particulate matter into the atmosphere from the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3 in excess of the amounts calculated by one of the following equations:
[A.A.C. R18-2-730.B]
- (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:
- $$E = 4.10P^{0.67}$$
- Where:
- E = the maximum allowable particulate emission rate in pounds-mass per hour.
- P = the process weight rate in tons-mass per hour.
[A.A.C. R18-2-730.A.1.a]
- (2) For process sources having a process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:
- $$E = 55.0P^{0.11} - 40$$
- Where "E" and "P" are defined as indicated in Condition V.C.1.e(1).
[A.A.C. R18-2-730.A.1.b]
- (3) For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.
- f. The Permittee shall not cause to be discharged into the atmosphere from the stacks of the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2 or Hot Baghouse #3, any gases which exhibit greater than 20% opacity, measured in accordance with EPA Reference Method 9. If the presence of

uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.B and C]

2. Air Pollution Control Requirement

- a. *The Permittee shall, to the extent practicable, operate and maintain the Cold Baghouse #1 to control particulate matter emissions from the Scrap Processing System in a manner consistent with good air pollution control practices.*

[A.A.C. R18-2-331.A.3.e]

[Material Permit Conditions are indicated with underlines and italics]

- b. *The Permittee shall, to the extent practicable, operate and maintain Hot Baghouse #1 to control particulate matter emissions from the Decoater Furnace in a manner consistent with good air pollution control practices.*

[A.A.C. R18-2-331.A.3.e]

[Material Permit Conditions are indicated with underlines and italics]

- c. *The Permittee shall, to the extent practicable, operate and maintain Hot Baghouse #2 to control particulate matter emissions from Melting Furnace #1 in a manner consistent with good air pollution control practices.*

[A.A.C. R18-2-331.A.3.e]

[Material Permit Conditions are indicated with underlines and italics]

- d. *The Permittee shall, to the extent practicable, operate and maintain Hot Baghouse #3 to control particulate matter emissions from Melting Furnace #2, Holding Furnace, and In-Line Degasser in a manner consistent with good air pollution control practices.*

[A.A.C. R18-2-331.A.3.e]

[Material Permit Conditions are indicated with underlines and italics]

3. Performance Testing Requirements

- a. The Permittee shall demonstrate compliance with Conditions II.C.1.a through d above by following EPA Reference Method 201A in conjunction with EPA Reference Method 202. In lieu of Method 201A and with prior approval from ADEQ, Method 5 can be used followed by particle size speciation.

[A.A.C. R18-2-306.A.3.c and -312]

- b. The initial performance test required by Condition II.C.3.a above shall be performed within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source.

[A.A.C. R18-2-312]

- c. The Permittee shall conduct subsequent performance test(s) for the source on an annual basis (between 11 and 13 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

4. Monitoring, Recordkeeping and Reporting Requirements

In accordance with the procedures described in Condition I.A of this Attachment, the Permittee shall monitor emissions from the stacks of the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3 once per week when in operation to demonstrate compliance with Condition II.C.1.f above.

[A.A.C. R18-2-306.A.3.c]

5. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.01.A, -306.A.3.c, -312, and R18-2-730.B.

[A.A.C. R18-2-325]

D. Nitrogen Oxides (NO_x)

1. Emission Limits and Standards

a. The Permittee shall limit the emissions of NO_x to 8.82 pounds per hour from the Hot Baghouse #1.

[A.A.C. R18-2-334.C.2]

b. The Permittee shall limit the emissions of NO_x to 7.29 pounds per hour from the Hot Baghouse #2.

[A.A.C. R18-2-334.C.2]

c. The Permittee shall limit the emissions of NO_x to 9.30 pounds per hour from the Hot Baghouse #3.

[A.A.C. R18-2-334.C.2]

d. *The Permittee shall not cause NO_x to be discharged from Hot Baghouse #1 into the atmosphere in excess of 38.62 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

e. *The Permittee shall not cause NO_x to be discharged from Hot Baghouse #2 into the atmosphere in excess of 25.89 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

f. *The Permittee shall not cause NO_x to be discharged from Hot Baghouse #3 into the atmosphere in excess of 28.20 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

2. Air Pollution Control Requirement

At all times when the burners are in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain, and operate low NO_x burners with good air pollution control practice for minimizing NO_x emissions.

[A.A.C. R18-2-331.A.3.d and e]

[Material Permit Conditions are indicated with underlines and italics]

3. Performance Testing Requirements

a. The Permittee shall demonstrate compliance with Conditions II.D.1.a through c by following EPA Reference Method 7 or 7E.

[A.A.C. R18-2-306.A.3.c and -312]

b. The initial performance test shall be performed within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source.

[A.A.C. R18-2-312.A]

c. Unless as specified in Condition II.D.3.d below, the Permittee shall conduct subsequent performance test(s) for the source on a semi-annual basis (between 5 and 7 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

d. If the rolling 12-month emissions from Hot Baghouse #1, Hot Baghouse #2, or Hot Baghouse #3 are less than 75% of their respective emission limits as required in Conditions II.D.1.d, e, or f respectively for 36 consecutive months, beginning after start-up, the next subsequent performance test(s) may be performed on an annual basis (between 11 and 13 months from the date of the previous test. Subsequently, if the total emissions from Hot Baghouse #1, Hot Baghouse #2, or Hot Baghouse #3 are greater or equal to 75% of their applicable emission limit as required in Conditions II.D.1.d, e, or f respectively for any rolling 12-month period, the Permittee shall revert to conducting subsequent performance test(s) on a semi-annual basis as required in Condition II.D.3.c above.

[A.A.C. R18-2-306.A.3.c and -312]

4. Monitoring, Recordkeeping, and Reporting

a. At the end of each calendar month, the Permittee shall calculate and record the monthly and 12-month rolling of NO_x emissions from each of the following: Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3.

[A.A.C. R18-2-306.A.3.c]

b. The monthly throughput shall be calculated by using the highest emission factor of the previous 3 performance tests multiplied by the monthly corresponding throughput(s) recorded in Condition II.B.3 or natural gas usage recorded in Condition II.B.4. From startup until the first performance test is conducted, the permittee shall use the following emission factors:

[A.A.C. R18-2-306.A.3.c]

- (1) Hot Baghouse #1:
 - (a) 0.32 lb/ton (decoater)
- (2) Hot Baghouse #2:
 - (a) 0.16 lb/ton (Melting Furnace #1)
 - (b) 121.33 lb/MMscf (Melting Furnace #1 burner)
- (3) Hot Baghouse #3:
 - (a) 0.16 lb/ton (Melting Furnace #2)
 - (b) 121.33 lb/MMscf (Melting Furnace #2 burner)
 - (c) 66.73 lb/MMscf (Holding Furnace burner)

5. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.01.A, -306.A.3.c and -312.

[A.A.C. R18-2-325]

E. Carbon Monoxide (CO)

1. Emission Limits and Standards

- a. The Permittee shall limit the emissions of CO to 7.20 pounds per hour from the Hot Baghouse #1.
[A.A.C. R18-2-334.C.2]
- b. The Permittee shall limit the emissions of CO to 6.16 pounds per hour from the Hot Baghouse #2.
[A.A.C. R18-2-334.C.2]
- c. The Permittee shall limit the emissions of CO to 8.38 pounds per hour from the Hot Baghouse #3.
[A.A.C. R18-2-334.C.2]

2. Performance Testing Requirements

- a. The Permittee shall demonstrate compliance with Conditions II.E.1.a through c through by following EPA Reference Method 10.
[A.A.C. R18-2-306.A.3.c and -312]
- b. The initial performance test required by Condition II.E.2.a shall be performed within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source.
[A.A.C. R18-2-312]

- c. The Permittee shall conduct subsequent performance test(s) for the source on an annual basis (between 11 and 13 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

3. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.01.A, -306.A.3.c and -312.

[A.A.C. R18-2-325]

F. Volatile Organic Compounds (VOCs)

1. Emission Limits and Standards

- a. *The Permittee shall not cause VOCs to be discharged from Hot Baghouse #1 into the atmosphere in excess of 20.06 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

- b. *The Permittee shall not cause VOCs to be discharged from Hot Baghouse #2 into the atmosphere in excess of 20.89 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

- c. *The Permittee shall not cause VOCs to be discharged from Hot Baghouse #3 into the atmosphere in excess of 52.21 tons per year as calculated on a 12-month rolling basis.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

2. Performance Testing Requirements

- a. The Permittee shall conduct performance testing in accordance with EPA Reference Method 25A in combination with Method 18. The Method 25A flame ionization analyzer, calibrated as propane, shall measure total hydrocarbons. Methane and ethane shall be determined using EPA Method 18 and subtracted from the total hydrocarbons to arrive at applicable VOC levels.

[A.A.C. R18-2-306.A.3.c and -312]

- b. The initial performance test shall be performed within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source.

[A.A.C. R18-2-312.A]

- c. Unless as specified in Condition II.F.2.d below, the Permittee shall conduct subsequent performance test(s) for the source on an a semi-annual basis (between 5 and 7 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

- d. If the total emissions from Hot Baghouse #1, Hot Baghouse #2, or Hot Baghouse #3 are less than 75% of their applicable emission limit as required in Conditions II.F.1.a, b, or c respectively on a 12-month rolling total for 36 consecutive months beginning after initial startup, the next subsequent performance test(s) may be performed on an annual basis (between 11 and 13 months from the date of the previous test. Subsequently, if the total emissions from Hot Baghouse #1, Hot Baghouse #2, or Hot Baghouse #3 are greater than or equal to 75% of their applicable emission limit as required in Conditions II.F.1.a, b, or c respectively, the Permittee shall conduct subsequent performance test(s) on a semiannual basis as required in Condition II.F.2.c above.

[A.A.C. R18-2-306.A.3.c and -312]

3. Monitoring, Recordkeeping, and Reporting

- a. At the end of each calendar month, the Permittee shall calculate and record the monthly and 12-month rolling of VOC emissions from each of the following: Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3.

[A.A.C. R18-2-306.A.3.c]

- b. The monthly throughput shall be calculated by using the highest emission factors of previous 3 performance tests multiplied by the monthly corresponding throughput(s) recorded in Condition II.B.3 or natural gas usage recorded in Condition II.B.4. From startup until the first performance test is conducted, the Permittee shall use the following emission factors:

[A.A.C. R18-2-306.A.3.c]

(1) Hot Baghouse #1:

(a) 0.16 lb/ton (Decoater)

(b) 5.5 lb/MMscf (burner)

(2) Hot Baghouse #2:

(a) 0.33 lb/ton (Melting Furnace #1)

(3) Hot Baghouse #3:

(a) 0.33 lb/ton (Melting Furnace #2)

(b) 0.208 lb/ton (Holding Furnace)

4. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.01.A, -306.A.3.c and -312.

[A.A.C. R18-2-325]

G. Hydrogen Chloride (HCl)

1. Emission Standards

a. The Permittee shall limit the emissions of HCl from the stack of Hot Baghouse #1 in accordance with Condition II.I.4.b(2)(d) below.

[40 CFR 63.1505(e)(1)(iv)]

b. The Permittee shall limit the emissions of HCl from the stacks of Hot Baghouses #2 and #3 in accordance with Condition II.I.4.c(3) below.

[40 CFR 63.1505(i)(4)]

2. Performance Testing

a. The Permittee shall demonstrate compliance with Condition II.I.2.b(2)(b) and b above by following EPA Reference Method 26A and the applicable procedures outlined in Condition II.I.6 below.

[A.A.C. R18-2-306.A.3.c and -312]

b. The initial performance test shall be conducted in accordance with Condition II.I.6.b below.

[A.A.C. R18-2-312 and 40 CFR 63.1511(b)]

c. The Permittee shall conduct subsequent performance test(s) for the source on a quarterly basis (between 2 and 4 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

d. If the result of eight (8) consecutive performance tests required by Condition II.G.1.a and b above respectively is less than or equal to 50% of the applicable emission limitation, the next subsequent performance test(s) may be performed on a semi-annual basis (between 5 and 7 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

e. If the result of any performance test required by Condition II.G.2.d above is greater than 50% of the applicable limit, the Permittee shall conduct subsequent performance test(s) on a quarterly basis (between 2 and 4 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

3. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.A.3.c.

[A.A.C. R18-2-325]

H. Dioxins/Furans (D/F)

1. Emission Standards

- a. The Permittee shall limit the emissions of D/F from the stack of Hot Baghouse #1 in accordance with Condition II.I.4.b(2)(c) below.
[40 CFR 63.1505(e)(1)(iv)]
- b. The Permittee shall limit the emissions of D/F from the stack of Hot Baghouses #2 and 3 in accordance with Condition II.I.4.c(2) below.
[40 CFR 63.1505(i)(4)]

2. Performance Testing

- a. The Permittee shall demonstrate compliance with Condition II.H.1.a and b above by following EPA Reference Method 23 and the applicable procedures outlined in Condition II.I.6 below.
[A.A.C. R18-2-306.A.3.c and -312]
- b. The initial performance test shall be conducted in accordance with Condition II.I.6.b below.
[A.A.C. R18-2-312 and 40 CFR 63.1511(b)]
- c. The Permittee shall conduct subsequent performance test(s) for the source on a quarterly basis (between 2 and 4 months from the date of the previous test).
[A.A.C. R18-2-306.A.3.c and -312]
- d. If the result of eight (8) consecutive performance tests required by Condition II.H.1.a and b above respectively is less than or equal to 50% of the applicable emission limitation, the next subsequent performance test(s) may be performed on a semi-annual basis (between 5 and 7 months from the date of the previous test).
[A.A.C. R18-2-306.A.3.c and -312]
- e. If the result of any performance test required by Condition II.H.2.d above is greater than 50% of the applicable limit, the Permittee shall conduct subsequent performance test(s) on a quarterly basis (between 2 and 4 months from the date of the previous test).
[A.A.C. R18-2-306.A.3.c and -312]

3. Permit Shield

Compliance with the terms of this Subsection shall be deemed compliance with R18-2-306.A.3.c.

[A.A.C. R18-2-325]

I. National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production Requirements

1. Applicability

a. This Section applies to secondary aluminum production equipment subject to 40 CFR 63 Subpart RRR.
[40 CFR 63.1500(a)]

b. The requirements of the general provisions in 40 CFR 63 Subpart A that are applicable to the owner or operator subject to the requirements of 40 CFR 63 Subpart RRR are shown in Appendix A to 40 CFR 63 Subpart RRR.
[40 CFR 63.1518.]

2. Operation, Maintenance, and Monitoring (OM&M) Plan

a. The Permittee shall prepare and implement a written OM&M plan. The Permittee shall submit the OM&M Plan to the Director within 90 days after a successful initial performance test under Condition II.I.6.b below. The plan must be accompanied by a written certification by the Permittee that the OM&M Plan satisfies all requirements and is otherwise consistent with the requirements of this Section. The Permittee shall comply with all of the provisions of the OM&M Plan as submitted to the Director, unless and until the plan is revised in accordance with the following procedures. Each plan must contain the following information:
40 CFR 63.1510(b)]

(1) 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)]

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

(1) 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 Condition II.I.3.
[40 CFR 63.1510(b)(3)]

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

(a) 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)]

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

- (3) 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)]
- (4) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in Condition II.I.2.a(1) above, including:
- (a) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
[40 CFR 63.1510(b)(6)(i)]
- (b) 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)]
- (5) 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)]
- c. If the Director determines at any time after receipt of the OM&M Plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the Permittee shall promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to the Director.
[40 CFR 63.1510(b)]
- d. Site-specific requirements for secondary aluminum processing units: The Permittee shall include the following information within the OM&M Plan prepared in accordance with Condition II.I.2 above:
- (1) The identification of each emission unit in the secondary aluminum processing unit;
[40 CFR 63.1510(s)(1)(i)]
- (2) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
[40 CFR 63.1510(s)(1)(ii)]
- (3) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting

calculations demonstrating initial compliance with each applicable emission limit;

[40 CFR 63.1510(s)(1)(iii)]

- (4) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and

[40 CFR 63.1510(s)(1)(iv)]

- (5) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in Condition II.I.5.h below.

[40 CFR 63.1510(s)(1)(v)]

- e. The SAPU compliance procedures within the OM&M Plan may not contain any of the following provisions:

- (1) Any averaging among emissions of differing pollutants;

[40 CFR 63.1510(s)(2)(i)]

- (2) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;

[40 CFR 63.1510(s)(2)(ii)]

- (3) The inclusion of any emission unit while it is shutdown; or

[40 CFR 63.1510(s)(2)(iii)]

- (4) The inclusion of any periods of startup or shutdown in emission calculations.

[40 CFR 63.1510(s)(2)(iv)]

- f. 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 Director containing the information required by Condition II.I.2.d above and obtain approval of the Director prior to implementing any revisions.

[40 CFR 63.1510(s)(3)]

- g. 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 in Condition II.I.2.a, the Permittee shall initiate corrective action. Corrective action shall 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 shall 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)]

h. Permit Shield

Compliance with Condition II.I.2 shall be deemed compliance with 40 CFR 63.1510(b)(1)-(7), -1510(s)(1)-(3), and -1506(p), -1518, and Appendix A to 40 CFR 63 Subpart RRR.

[A.A.C. R18-2-325]

3. Operating Requirements

a. The Permittee shall comply with each applicable limit at all times, including periods of startup and shutdown, including all applicable emission standards in Table 1 of 40 CFR 63 Subpart RRR.

[40 CFR 63.1505(a) and Table 1 of 40 CFR 63 Subpart RRR]

b. The Permittee shall operate in accordance with Table 2 of 40 CFR 63 Subpart RRR.

[40 CFR 63.1506(a)(4) and Table 2 of 40 CFR 63 Subpart RRR]

c. *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 Director 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) and A.A.C. R18-2-331.A.3.d]

[Material permit conditions are indicated by underline and italics]

d. Labeling

(1) The Permittee shall provide and maintain easily visible labels posted at each group 1 furnace that identifies the applicable emission limits and means of compliance, including:

(a) The type of affected source or emission unit.

[40 CFR 63.1506(b)(1)]

(b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to:

[40 CFR 63.1506(b)(2)]

(i) The type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.);

- (ii) Flux materials and addition practices; and
 - (iii) The applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
 - (c) The Permittee shall 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 Condition II.I.3.d above are intact and legible.
[40 CFR 63.1510(c)]
- e. Capture/collection Systems
 - (1) The Permittee shall install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device.
[40 CFR 63.1510(d)(1) and A.A.C. R18-2-331.A.d and e]
[Material permit conditions are indicated by underlines and italics]
 - (2) For each affected source or emission unit equipped with an add-on air pollution control device, the Permittee shall 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 American Conference of Governmental Industrial Hygienists (ACGIH) Guidelines (incorporated by reference, see 40 CFR § 63.14);
[40 CFR 63.1506(c)(1)]
 - (3) The Permittee shall 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)]
 - (4) The Permittee shall operate each capture/collection system according to the procedures and requirements in the OM&M plan as described in Condition II.I.2 above.
[40 CFR 63.1506(c)(3)]
- f. Feed/Charge Weight
 - (1) For each affected source subject to an emission limit in kg/Mg (lb/ton) or ug/Mg (gr/ton) of feed/charge, the Permittee shall install, calibrate, operate and maintain 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, except as provided in Condition II.I.3.f(3) below. 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 Director to determine the

total weight of feed/charge or aluminum production to the affected source or emission unit.

[40 CFR 63.1506(d)(1) and 40 CFR 63.1510(e)]

- (a) The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The Permittee may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

[40 CFR 63.1510(e)(1)]

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

[40 CFR 63.1510(e)(2)]

- (2) The Permittee shall operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

[40 CFR 63.1506(d)(2)]

- (3) 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:

- (a) 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)]

- (b) 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)]

g. Aluminum Scrap Shredder

- (1) The Permittee shall operate a bag leak detection system, or a continuous opacity monitor, or conduct visible emissions observations on the baghouse controlling emissions from the aluminum scrap shredder.

[40 CFR 63.1506(e)]

- (a) If a bag leak detection system is used to meet the monitoring requirements in Condition II.I.5 below the Permittee shall:

[40 CFR 63.1506(e)(1)]

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

[40 CFR 63.1506(e)(1)(i)]

- (ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the 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(e)(1)(ii)]

- (b) If a continuous opacity monitoring system is used to meet the monitoring requirements in Condition II.I.5 below, the Permittee shall 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(e)(2)]

- (c) If visible emission observations are used to meet the monitoring requirements in Condition II.I.5 below, the Permittee shall initiate corrective action within 1-hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.

[40 CFR 63.1506(e)(3)]

h. Decoater Furnace

- (1) For each afterburner, the Permittee shall:

[40 CFR 63.1506(g)(1)]

- (a) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

[40 CFR 63.1506(g)(1)(i)]

- (b) Operate each afterburner in accordance with the OM&M plan.
[40 CFR 63.1506(g)(1)(ii)]
- (2) If a bag leak detection system is used to meet the fabric filter monitoring requirements in Condition II.I.5, the Permittee shall;
[40 CFR 63.1506(g)(2)]
- (a) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete any necessary corrective action procedures in accordance with the OM&M plan; and
[40 CFR 63.1506(g)(2)(i)]
- (b) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the 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(g)(2)(ii)]
- (3) If a continuous opacity monitoring system is used to meet the monitoring requirements in Condition II.I.5 below, the Permittee shall 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(g)(3)]
- (4) The Permittee shall 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(g)(4)]
- (5) For a continuous injection device, the Permittee shall 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(g)(5)]
- (6) At least 30 days prior to startup, the Permittee shall submit a notification to the Director indicating the monitoring method option in Condition II.I.3.h(2) or II.I.3.h(3) above that is being selected. The Permittee shall not change monitoring methods without notifying the Director as required in Condition II.I.3.h(7).

[A.A.C. R18-2-306.A.3.c]

- (7) The Permittee shall submit a notification at least 30 days prior to switching the monitoring method to a different method in Condition II.I.3.h(2) or II.I.3.h(3) above.

[A.A.C. R18-2-306.A.3.c]

i. In-Line Degasser

The Permittee shall operate the in-line degasser using no reactive materials.

[40 CFR 63.1506(l)]

j. Group 1 Furnaces (Sidewell Melting Furnaces and Holding Furnace)

- (1) If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the Permittee shall:

[40 CFR 63.1506(m)(1)]

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

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

(c) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.

- (2) If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, the Permittee shall:

[40 CFR 63.1506(m)(2)]

(a) Initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and

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

- (3) The Permittee shall 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)]

- (4) For a continuous lime injection system, the Permittee shall 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)]

- (5) The Permittee shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

[40 CFR 63.1506(m)(5)]

- (6) The Permittee shall operate each sidewell furnace such that:

[40 CFR 63.1506(m)(6)]

- (a) 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.

- (b) 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.

- (7) 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)]

- (8) At least 30 days prior to startup, the Permittee shall submit a notification to the Director indicating the monitoring method option in Condition II.I.3.j(1) or II.I.3.j(2) above selected. The Permittee shall not change monitoring methods without notifying the Director as required in Condition II.I.3.j(8).

[A.A.C. R18-2-306.A.3.c]

- (9) The Permittee shall submit a notification at least 30 days prior to switching the previously selected monitoring method to a different option in Condition II.I.3.j(1) or II.I.3.j(2) above.

[A.A.C. R18-2-306.A.3.c]

- k. Prior to changing furnace classifications to those not already authorized, the Permittee shall submit a permit application to incorporate the applicable standards from 40 CFR 63, Subpart RRR at 40 CFR 63.1514.
[40 CFR 63.1514]

l. Permit Shield

Compliance with Condition II.I.3 shall be deemed compliance with 40 CFR 63.1505(a), -1506(a)-(e), (g), (l), (m), (p), -1510(c)-(e), and -1514, Table 1 and Table 2 of 40 CFR 63 Subpart RRR.

[A.A.C. R18-2-325]

4. Emission Limits and Standards

a. Scrap Processing System

- (1) The Permittee shall not discharge or cause to be discharged to the atmosphere, emissions in excess of 0.023 grams (g) of PM per dry standard cubic meter (dscm) (0.010 grain (gr) of PM per dry standard cubic foot (dscf).

[40 CFR 63.1505(b)(1)]

- (2) The Permittee shall not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from Cold Baghouse #1 if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.

[40 CFR 63.1505(b)(2)]

b. Decoater Furnace

- (1) The Permittee shall equip the Decoater Furnace with an afterburner having a design residence time of at least 1 second and operate the afterburner is at a temperature of at least 760 °C (1400 °F) at all times.

[40 CFR 63.1505(e)]

- (2) The Permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of:

[40 CFR 63.1505(e)(1)]

- (a) 0.10 kg of THC, as propane, per Mg (0.20 lb of THC, as propane, per ton) of feed/charge;

[40 CFR 63.1505(e)(1)(i)]

- (b) 0.15 kg of PM per Mg (0.30 lb per ton) of feed/charge;

[40 CFR 63.1505(e)(1)(ii)]

- (c) 5.0 µg of D/F TEQ per Mg (7.0×10^{-5} gr of D/F TEQ per ton) of feed/charge; and

[40 CFR 63.1505(e)(1)(iii)]

- (d) 0.75 kg of HCl per Mg (1.50 lb per ton) of feed/charge.
[40 CFR 63.1505(e)(1)(iv)]
- (3) The Permittee shall not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from Hot Baghouse #1 if a COM is chosen as the monitoring option.
[40 CFR 63.1505(e)(2)]
- c. Sidewall Melting Furnaces and Holding Furnace (Group 1 Furnaces)
- (1) The Permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge.
[40 CFR 63.1505(i)(1)]
- (2) The Permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of 15 μg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge or 10 percent of the uncontrolled HCl emissions, by weight.
[40 CFR 63.1505(i)(3)]
- (3) The Permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of 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)]
- (4) The Permittee shall not allow visible emissions in excess of 10 percent opacity from Hot Baghouse #2 or Hot Baghouse #3 if a COM is chosen as the monitoring option.
[40 CFR 63.1505(i)(5)]
- (5) 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)]
- (6) 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 sidewall at times when the level of molten metal falls below the top of the passage between the sidewall and the hearth, must comply with the emission limits in Conditions II.I.4.c(1) through (3) on the basis of the combined emissions from the sidewall and the hearth.
[40 CFR 63.1505(i)(7)]
- d. In-line Fluxer

The Permittee shall not use reactive flux materials in the in-line fluxer. 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.

[R18-2-306.01.A and 40 CFR 63.1505(j)(3)]

e. Secondary Aluminum Process Unit (SAPU)

- (1) 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)]

$$L_{c_{PM}} = \frac{\sum_{i=1}^n (L_{ti_{PM}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

Where:

T_{ti} = The mass of feed/charge for 24 hours for individual emission unit i ;

$L_{ti_{PM}}$ = The PM emission limit for an individual emission unit of this section for a group 1 furnace; 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.

- (2) The Permittee shall not discharge or allow to be discharged to the atmosphere, any 3-day, 24-hour rolling average emissions of HCl in excess of:

[40 CFR 63.1505(k)(2)]

$$L_{c_{HCl}} = \frac{\sum_{i=1}^n (L_{ti_{HCl}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

Where:

T_{ti} = The mass of feed/charge for 24 hours for individual emission unit i ;

$L_{ti_{HCl}}$ = The HCl emission limit for an individual emission unit of this section for a group 1 furnace; and

$L_{c_{HCl}}$ = The daily HCl 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

- (3) The Permittee shall not discharge or allow to be discharged to the atmosphere, any 3-day, 24-hour rolling average emissions of dioxins and furans (D/F) in excess of:

[40 CFR 63.1505(k)(3)]

$$L_{CD} = \frac{\sum_{i=1}^n \left(L_{tiD} \times T_{ti} \right)}{\sum_{i=1}^n (T_{ti})}$$

Where:

T_{ti} = The mass of feed/charge for 24 hours for individual emission unit i;

L_{tiD/F} = The D/F emission limit for the group 1 furnace; and

L_{CD/F} = 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.

- (4) The Permittee may demonstrate compliance with the emission limits of Conditions II.I.4.e(1) through (3) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of this permit Condition II.I.4.c.

[40 CFR 63.1505(k)(4)]

f. Permit Shield

Compliance with Condition II.I.4 shall be deemed compliance with 40 CFR 63.1505 (b), (e), (i), (j), and (k).

[A.A.C. R18-2-325]

5. Monitoring Requirements

- a. The Permittee shall monitor all control equipment and processes according to the requirements of 40 CFR 63.1510(a) and Table 3 of 40 CFR 63 Subpart RRR.

[40 CFR 63.1510(a) and Table 3 of 40 CFR 63 Subpart RRR]

b. Capture Collection System

- (1) The Permittee shall 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 Condition II.I.3.e above and record the results of each inspection. The 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 shall be performed in accordance with the following:

[40 CFR 63.1510(d)(2)]

- (a) Conduct annual flow rate measurements using EPA Methods 1 and 2 in Appendix A to 40 CFR part 60, or conduct annual verification of a permanent total enclosure using EPA Method 204.

[40 CFR 63.1510(d)(2)(i)]

- (2) As an alternative to the flow rate measurement, the inspection may satisfy the requirements of Condition II.I.5.b(1) above, including the operating requirements in Condition II.I.3.e above, by including permanent total enclosure verification in accordance with Condition II.I.5.b(1)(a). Inspections that fail to successfully demonstrate that the requirements of Condition II.I.3.e above are met, shall be followed by repair or adjustment to the system operating conditions and a follow up inspection within 45 days to demonstrate that the requirements are fully met.

[40 CFR 63.1510(d)(2)]

c. Fabric Filters and Lime-Injected Fabric Filters

The Permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system (BLDS) as required in Condition II.I.5.c(1) below or a continuous opacity monitoring system (COMS) as required in Condition II.I.5.c(2) below.

- (1) If a bag leak detection system is used to meet the monitoring requirements in Condition II.I.5.c above, the Permittee shall:

- (a) Install and operate a BLDS for each exhaust stack of a fabric filter.

[40 CFR 63.1510(f)(1)(i)]

- (b) Each BLDS must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions.

[40 CFR 63.1510(f)(1)(ii)]

- (c) The BLDS 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)]

- (d) The BLDS sensor must provide output of relative or absolute PM loadings.

[40 CFR 63.1510(f)(1)(iv)]

- (e) The BLDS must be equipped with a device to continuously record the output signal from the sensor.
[40 CFR 63.1510(f)(1)(v)]
 - (f) The BLDS 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)]
 - (g) For positive pressure fabric filter systems, a BLDS must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the BLDS must be installed downstream of the fabric filter.
[40 CFR 63.1510(f)(1)(vii)]
 - (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
[40 CFR 63.1510(f)(1)(viii)]
 - (i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
[40 CFR 63.1510(f)(1)(ix)]
 - (j) Following initial adjustment of the system, the Permittee shall 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)]
- (2) If a COMS is used to meet the monitoring requirements in Condition II.I.5.c above, the Permittee shall:
- (a) Install, calibrate, maintain, and operate a COMS to measure and record the opacity of emissions exiting each exhaust stack.
[40 CFR 63.1510(f)(2)(i)]
 - (b) Each COMS 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)]

- (3) If visible emission observation is used to meet the monitoring requirements in Condition II.I.5.c above for the aluminum scrap shredder, the Permittee shall:

[40 CFR 63.1510(f)(3)]

- (a) Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in appendix A to 40 CFR part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and

- (b) Record the results of each test.

d. Afterburner

- (1) The permittee must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in 40 CFR 63 Subpart A.

[40 CFR 63.1510(g)(1)]

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

[40 CFR 63.1510(g)(2)]

- (a) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

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

- (c) The recorder response range must include zero and 1.5 times the average temperature established according to 40 CFR 63.1512(m).

- (d) 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.

- (3) The permittee must conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:

[40 CFR 63.1510(g)(3)]

- (a) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

- (b) Inspection for proper adjustment of combustion air;
 - (c) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
 - (d) Inspection of dampers, fans, and blowers for proper operation;
 - (e) Inspection for proper sealing;
 - (f) Inspection of motors for proper operation;
 - (g) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
 - (h) Inspection of afterburner shell for corrosion and/or hot spots;
 - (i) Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and
 - (j) Verification that the equipment is maintained in good operating condition.
 - (k) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.
- e. Fabric Filter Inlet Temperature (Hot Baghouse #1-3)

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

[40 CFR 63.1510(h)(1) and A.A.C. R18-2-331.A.3.c]

[Material permit conditions are indicated by underlines and italics]

- (1) The temperature monitoring device must meet each of these performance and equipment specifications:
 - (a) 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)]
 - (b) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in Condition II.I.6.p below.
[40 CFR 63.1510(h)(2)(ii)]

- (c) 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)]

f. Lime Injection

- (1) The Permittee shall verify that lime is always free-flowing by either:
[40 CFR 63.1510(i)(1)]
- (a) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the Permittee shall increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The Permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or
- (b) Subject to the approval of the Director, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the Permittee shall promptly initiate and complete corrective action; or
- (c) Subject to the approval of the Director, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the Permittee shall promptly initiate and complete corrective action.
- (2) For a continuous lime injection system, the Permittee shall record the lime feeder setting once each day of operation.
[40 CFR 63.1510(i)(2)]
- (3) If lime is intermittently being added to a lime coated fabric filter, the Permittee shall obtain approval from the Director for a lime addition monitoring procedure.
[40 CFR 63.1510(i)(3)]
- (4) At least once per month, the Permittee shall 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.

[40 CFR 63.1510(i)(4)]

- (a) 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 Director 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.
- (b) 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 Director 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.
- (5) If the Permittee uses a lime-coated fabric filter that employs intermittent or noncontinuous lime addition, the Permittee may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the 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(v)]

g. Total Reactive Flux Injection Rate

- (1) The Permittee shall 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)]

- (a) 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.
- (b) 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

permitting authority for major sources 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.

- (c) The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- (2) The Permittee shall 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.
[40 CFR 63.1510(j)(2)]
- (3) The Permittee shall 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)]
 - (a) Gaseous or liquid reactive flux other than chlorine; and
 - (b) Solid reactive flux.
- (4) The Permittee shall calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test.
[40 CFR 63.1510(j)(4)]
- (5) For solid flux that is added intermittently, the Permittee shall record the amount added for each operating cycle or time period used in the performance test.
[40 CFR 63.1510(j)(4)]
- (6) The Permittee having a group 1 furnace or in-line degasser 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)]

h. Secondary Aluminum Processing Unit

- (1) Except as provided in Condition II.I.5.h(2) below, the Permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall:

[40 CFR 63.1510(t)]

- (a) 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 Condition II.I.3.f(1) above. 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)]

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

[40 CFR 63.1510(t)(2)]

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

[40 CFR 63.1510(t)(3)]

- (d) Compute the 24-hour daily emission rate using the following equation:

[40 CFR 63.1510(t)(4)]

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i}$$

Where:

E_{day} = The daily PM, HCl, and D/F 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 $\mu\text{g}/\text{Mg}$ of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

- (e) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3. 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 Condition II.I.4.e above.

[40 CFR 63.1510(t)(5)]

- (2) As an alternative to the procedures of Condition II.I.5.h(1) above, the Permittee may demonstrate through performance tests that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

[40 CFR 63.1510(u)]

i. In-Line Degasser

The Permittee shall submit a certification of compliance with the operational standard for no reactive flux materials in Condition II.I.3.i above for each 6-month reporting period. Each certification must contain the information in Condition II.I.9.a(2)(b) below.

[40 CFR 63.1510(m)]

j. Sidewell Furnaces

- (1) The Permittee shall 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)]

- (2) The Permittee shall submit a certification of compliance with the operational standards in Condition II.I.3.j(6) above for each 6-month reporting period. Each certification must contain the information in Condition II.I.9.a(2)(a) below.

[40 CFR 63.1510(n)(2)]

k. Alternative Monitoring Methods

If the Permittee opts to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative methods which may be authorized pursuant to §63.1510(j)(5) and §63.1510(v), the Permittee shall 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)]

l. Permit Shield

Compliance with the Subsection shall be deemed compliance with 40 CFR 63.1510(a), (d)-(j), (m), (n), and (t)-(w) and Table 3 of 40 CFR 63 Subpart RRR.

[A.A.C. R18-2-325]

6. Performance Testing Requirements and Procedures

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

[40 CFR 63.1511(a)]

b. Initial Performance Test

Following approval of the site-specific test plan, Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in Condition II.I.8.b. The Permittee shall conduct the initial performance test within 180 days after startup. Except for the date by which the performance test must be conducted, the Permittee shall conduct each performance test in accordance with the requirements and procedures set forth in 40 CFR 63.7(c).

[40 CFR 63.1511(b)]

- (1) 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 Director. These new parametric settings shall be used to demonstrate compliance for the period being tested.

[40 CFR 63.1511(b)(1)]

- (2) 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)]

- (3) 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)]

- (a) 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)]

- (b) 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)]

- (c) 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)]

- (4) 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)]
 - (5) 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)]
 - (6) The Permittee shall apply Conditions II.I.6.b(1) through (5) above 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)]
 - (7) The Permittee shall not conduct performance tests during periods of malfunction.
[40 CFR 63.1511(b)(7)]
- c. The Permittee shall use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:
[40 CFR 63.1511(c)]
- (1) Method 1 for sample and velocity traverses.
 - (2) Method 2 for velocity and volumetric flow rate.
 - (3) Method 3 for gas analysis.
 - (4) Method 4 for moisture content of the stack gas.
 - (5) Method 5 for the concentration of PM.
 - (6) Method 9 for visible emission observations.
 - (7) Method 23 for the concentration of D/F.
 - (8) Method 25A for the concentration of THC, as propane.
 - (9) 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 shall measure the fabric filter

inlet concentration of HCl at a point before lime is introduced to the system.

- d. The Permittee may use alternative test methods as provided in Conditions II.I.6.d(1) through (2) below.

[40 CFR 63.1511(d)]

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

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

- e. The Permittee shall conduct a performance test every 5 years following the initial performance test.

[40 CFR 63.1511(e)]

- f. The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by Condition II.I.5 above, that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the Permittee shall use the appropriate procedures in this section and submit the information required by Condition II.I.8.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 Director:

[40 CFR 63.1511(g)]

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

[40 CFR 63.1511(g)(1)]

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

[40 CFR 63.1511(g)(2)]

(3) 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)]

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

[40 CFR 63.1511(g)(4)]

- (5) 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 Condition II.I.6.a above. In addition, if the Permittee elects 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 Conditions II.I.6.f(1) through (4).

[40 CFR 63.1511(g)(5)]

- g. 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 Condition II.I.4.e above.

[40 CFR 63.1511(h)]

- h. With the prior approval of the Director, 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)]

- (1) 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;
- (2) 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;
- (3) 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;
- (4) 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
- (5) 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.

i. Aluminum scrap shredder

[40 CFR 63.1512(a)]

- (1) The Permittee shall conduct performance tests to measure PM emissions at the outlet of the control system.
- (2) If visible emission observation is the selected monitoring option, the Permittee shall record visible emission observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test according to the requirements of Method 9 in appendix A to 40 CFR part 60.
- (3) If emissions observations by ASTM Method D7520-13 (incorporated by reference, see § 63.14) is the selected monitoring option, Permittee shall record opacity observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test.

j. Decoater Furnace

[40 CFR 63.1512(c)]

- (1) The Permittee shall conduct performance tests to measure emissions of THC, D/F, HCl, and PM at the outlet of the control device.
- (2) The Permittee shall maintain the average afterburner operating temperature in each 3-hour block period at or above 760 °C (1400 °F) for the test.
- (3) The Permittee shall submit a written certification in the notification of compliance status report containing the information required by Condition II.I.8.b(7) below.

k. Group 1 furnaces (Sidewell Melting Furnaces and Holding Furnace)

[40 CFR 63.1512(d)]

- (1) If the group 1 furnace processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter, the Permittee shall 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).
- (2) If the group 1 furnace processes scrap only clean charge materials with emissions controlled by a lime-injected fabric filter, the

Permittee shall 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).

- (3) 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.
- (4) If the sidewell group 1 furnace that conducts reactive fluxing (except for coverflux) 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, the Permittee shall conduct the performance test to measure emissions from both the sidewell and the hearth.

l. Secondary aluminum processing unit

[40 CFR 63.1512(j)]

The Permittee shall conduct performance tests as described in this section. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM, HCl 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. A performance test is required for:

- (1) Each group 1 furnace processing only clean charge to measure emissions of PM and either:
 - (a) Emissions of HCl (for determining the emission limit); or
 - (b) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).
- (2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:
 - (a) Emissions of HCl (for determining the emission limit); or
 - (b) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

m. 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 shall measure (or otherwise determine) and record the total weight of feed/charge to the

affected source or emission unit for each of the three test runs and calculate and record the total weight. If the Permittee 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)]

n. Continuous opacity monitoring system

[40 CFR 63.1512(l)]

If an affected source or emission unit uses a continuous opacity monitoring system, the Permittee 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.

o. Afterburner

[40 CFR 63.1512(m)]

(1) Prior to the initial performance test, Permittee shall conduct a performance evaluation for the temperature monitoring device according to the requirements of § 63.8.

(2) The Permittee shall use these procedures to establish an operating parameter value or range for the afterburner operating temperature.

(a) Continuously measure and record the operating temperature of each afterburner every 15 minutes during the THC and D/F performance tests;

(b) Determine and record the 15-minute block average temperatures for the three test runs; and

(c) Determine and record the 3-hour block average temperature measurements for the 3 test runs.

p. Inlet Gas Temperature

[40 CFR 63.1512(n)]

If the Permittee operates a scrap dryer/delacquering kiln/decoating kiln or group 1 furnace using a lime-injected fabric filter, the Permittee shall use the following procedures to establish an operating parameter value or range for the inlet gas temperature.

(1) 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;

- (2) Determine and record the 15-minute block average temperatures for the 3 test runs; and
- (3) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

q. Flux injection rate

- (1) The Permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

[40 CFR 63.1512(o)]

- (a) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests in 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)]

- (b) 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)]

- (c) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 2:

[40 CFR 63.1512(o)(3)]

$$W_t = F_1W_1 + F_2W_2$$

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;

- (d) 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.

[40 CFR 63.1512(o)(4)]

- (e) If a solid reactive flux other than magnesium chloride or potassium fluoride is used, the Permittee shall derive the appropriate proportion factor subject to approval by the permitting authority for major sources.

[40 CFR 63.1512(o)(5)]

r. Lime Injection

The Permittee shall 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.

- (1) 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)]

- (2) 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. Bag Leak Detection System

For bag leak detection systems used to comply with the requirements of 40 CFR 63 Subpart RRR, the Permittee shall submit the information described in 40 CFR 63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in 40 CFR 1510(f).

[40 CFR 63.1512(q)]

t. Labeling

For each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, and in-line fluxer, the Permittee shall submit the information described in Condition II.I.8.b(3) as part of the notification of compliance status report to document conformance with the operational standard in Condition II.I.3.d(1) above.

[40 CFR 63.1512(r)]

u. Capture/Collection System

The Permittee shall submit the information described in Condition II.I.8.b(2) as part of the notification of compliance status report to document conformance with the operational standard in Condition II.I.3.e above.

[40 CFR 63.1512(s)]

v. Permit Shield

Compliance with Condition II.I.6 shall be deemed compliance with 40 CFR 63.1510(d), (e), -1511(a)-(e), (g), (h) and (i), -1512(a), (c), (d), (j), (k), (l) and (m)-(s), and -1513.

[A.A.C. R18-2-325]

7. Equations for Determining Compliance

a. THC emission limit

[40 CFR 63.1513(a)]

The Permittee shall use the following equation to determine compliance with emission limits for THC:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{M_v \times P \times 10^6}$$

Where:

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;

C = Measured volume fraction of pollutant, ppmv;

MW = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole):

THC (as propane) = 44.11;

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/lb);

K₂ = Conversion factor, 1,000 L/m³ (1 ft³/ft³);

M_v = Molar volume, 24.45 L/g-mole (385.3 ft³/lb-mole); and

P = Production rate, Mg/hr (ton/hr).

b. PM, HCl, HF and D/F emission limits

[40 CFR 63.1513(b)]

The Permittee shall use the following equation to determine compliance with emission limits 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 kg/Mg (lb/ton) of feed;

C = Concentration of PM, HCl or HF, in g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, in dscm/hr (dscf/hr);

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and

P = Production rate, in Mg/hr (ton/hr).

The Permittee shall use the following equation determine compliance with emission limits for D/F:

[40 CFR 63.1513(b)(2)]

$$E = \frac{C \times Q}{P}$$

Where:

E = Emission rate of D/F, $\mu\text{g}/\text{Mg}$ (gr/ton) of feed;

C = Concentration of D/F, $\mu\text{g}/\text{dscm}$ (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and

P = Production rate, Mg/hr (ton/hr).

- c. HCl percent reduction standard

[40 CFR 63.1513(c)]

The Permittee shall use the following equation to determine compliance with HCl percent reduction standards:

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

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).

- d. Conversion of D/F measurements to TEQ units

[40 CFR 63.1513(d)]

To convert D/F measurements to TEQ units, the Permittee shall 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 § 63.14.

- e. Secondary aluminum processing unit

The Permittee shall use the procedures in Conditions II.I.7.e(1), (2), and (3) or the procedure in Condition II.I.7.e(4) to determine compliance with emission limits for a secondary aluminum processing unit.

[40 CFR 63.1513(e)]

- (1) 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 (E_{cPM}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cPM}) calculated using the equation in Condition II.I.4.e above.

[40 CFR 63.1513(e)(1)]

$$E_{C_{PM}} = \frac{\sum_{i=1}^n (E_{ti_{PM}} \times T_{ti})}{\sum_{i=1}^n T_{ti}}$$

Where:

$E_{c_{PM}}$ = The mass-weighted PM emissions for the secondary aluminum processing unit;

$E_{ti_{PM}}$ = Measured PM emissions for individual emission unit, or group of co-controlled emission units, i;

T_{ti} = The average feed rate for individual emission unit i 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; and

n = The number of emission units, and groups of co-controlled emission units in the secondary aluminum processing unit.

- (2) The Permittee shall use the following equation to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit ($E_{c_{HCl}}$) is less than or equal to the emission limit for the secondary aluminum processing unit ($L_{c_{HCl}}$) calculated using the equation Condition II.I.4.e(2) above.

[40 CFR 63.1513(e)(2)]

$$E_{C_{HCl}} = \frac{\sum_{i=1}^n (E_{ti_{HCl}} \times T_{ti})}{\sum_{i=1}^n T_{ti}}$$

Where:

$E_{c_{HCl}}$ = The mass-weighted HCl emissions for the secondary aluminum processing unit; and

$E_{ti_{HCl}}$ = Measured HCl emissions for individual emission unit, or group of co-controlled emission units i.

- (3) The Permittee shall use the following equation 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 ($L_{c_{D/F}}$) calculated using the equation in Condition II.I.4.e(3) above.

[40 CFR 63.1513(e)(3)]

$$E_{C_{D/F}} = \frac{\sum_{i=1}^n (E_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^n T_{ti}}$$

Where:

$E_{cD/F}$ = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{tiD/F}$ = Measured D/F emissions for individual emission unit, or group of co-controlled emission units i.

- (4) As an alternative to using the equations in Conditions II.I.7.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 limits for a new group 1 furnace in Condition II.I.4.c above.

[40 CFR 63.1513(e)(4)]

f. 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 Condition II.I.4 above expressed in units of pounds per ton of feed/charge, or $\mu\text{g TEQ}$ or ng TEQ per Mg of feed/charge, demonstrate compliance during periods of startup and shutdown in accordance with Condition II.I.7.f(1) below or determine the emissions per unit of feed/charge during periods of startup and shutdown in accordance with Condition II.I.7.f(2) below. 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 Condition II.I.4.e above, the SAPU monitoring requirements in Condition II.I.5.h(2) above and the SAPU emissions calculations in Condition II.I.7.e above.

[40 CFR 63.1513(f)]

- (1) 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)]

- (2) For periods of startup and shutdown, divide the measured emissions in lb/hr or $\mu\text{g/hr}$ 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)]

8. Notifications

a. Initial Notifications

The Permittee shall submit initial notifications to the Director as described in the following:

- (1) As required by 40 CFR 63.9(b)(5), after the effective date of 40 CFR 63 Subpart RRR, if the Permittee intends to construct a new affected source or reconstruct an affected source subject to 40 CFR 63 Subpart RRR, or reconstruct a source such that it becomes an affected source subject to 40 CFR 63 Subpart RRR, the Permittee shall provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.
[40 CFR 63.1515(a)(4)]
 - (a) The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or
[40 CFR 63.1515(a)(4)(i)]
 - (b) The application shall be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
[40 CFR 63.1515(a)(4)(ii)]
- (2) As required by 40 CFR 63.9(d), the Permittee shall provide notification of any special compliance obligations for a new source.
[40 CFR 63.1515(a)(5)]
- (3) As required by 40 CFR 63.9(e) and (f), the Permittee shall provide notification of the anticipated date for conducting performance tests and visible emission observations. The Permittee shall notify the Director 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)]
- (4) As required by 40 CFR 63.9(g), the Permittee shall provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems, if chosen.
[40 CFR 63.1515(a)(7)]

b. Notification of Compliance Status Report

The Permittee shall submit a notification of compliance status report within 90 days after conducting the initial performance test required by Condition II.I.6.b above. 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 Condition II.I.8.a. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If the Permittee submits the information specified at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

[40 CFR 63.1515(b)]

- (1) The Permittee shall 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)]

- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system), if chosen;

[40 CFR 63.1515(b)(2)]

- (3) Unit labeling as described in Condition II.I.3.d, including process type or furnace classification and operating requirements;

[40 CFR 63.1515(b)(3)]

- (4) 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, afterburner operating temperature, 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)]

- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in Condition II.I.3.e above;

[40 CFR 63.1515(b)(5)]

- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in Condition II.I.5.c above.

[40 CFR 63.1515(b)(6)]

(7) Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in § 63.1505(e) and
[40 CFR 63.1515(b)(7)]

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

c. Permit Shield

Compliance with Condition II.I.8 shall be deemed compliance with 40 CFR 63.1513, 1515(a)-(b).
[A.A.C. R18-2-325]

9. Reporting Requirements

a. The Permittee shall submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3). Except, the Permittee shall 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 shall submit a report stating that no excess emissions occurred during the reporting period.
[40 CFR 63.1516(b)]

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

(a) If applicable, 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)]

(b) If applicable, 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)]

(c) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
[40 CFR 63.1516(b)(1)(iii)]

(d) 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)]

- (e) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.

[40 CFR 63.1516(b)(1)(vi)]

- (f) 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)]

- (2) The Permittee shall include each of the following certification, as applicable:

- (a) 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)]

- (b) 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)]

- (c) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with §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)]

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

[40 CFR 63.1516(b)(3)]

- (a) Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by this subpart, the Permittee shall submit the results of the

performance tests, including any associated fuel analyses, following the procedure specified in the following:

- (i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html), you 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 you claim that some of the performance test information being submitted is confidential business information (CBI), you 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)]

- (ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

[40 CFR 63.1516(b)(3)(i)(B)]

- (4) A malfunction report that is required in Condition II.I.9.b shall be submitted simultaneously with the semiannual excess

emissions/summary report required by Condition II.I.9.a and the compliance certification in Condition VII of Attachment "A".
[40 CFR 63.1516(b)(4)]

b. For the purpose of semiannual certifications of compliance required by 40 CFR part 70 or 71, the Permittee shall certify continuing compliance based upon, but not limited to, the following conditions:
[40 CFR § 70, 71, 63.1516(c)]

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

(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

c. If there was a malfunction during the reporting period, the Permittee shall submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall include the following:
[40 CFR 63.1516(d)]

(1) A list of the affected source or equipment;

(2) An estimate of the quantity of each regulated pollutant emitted over any emission limit;

(3) A description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters; and

(4) 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).

d. All reports required by 40 CFR 63 Subpart RRR not subject to the requirements in Condition II.I.8 shall be sent to the Director.
[40 CFR 63.1516(e)]

e. Permit Shield

Compliance with Condition II.I.9 shall be deemed compliance with 40 CFR 63.1516(b), (c), (d), and (e).

[A.A.C. R18-2-325]

10. Recordkeeping Requirements

- a. The Permittee shall retain each record required by 40 CFR 63 Subpart RRR 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)]
- b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche
[40 CFR 63.1517(a)(2)]
- c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
[40 CFR 63.1517(a)(3)]
- d. In addition to the general records required by § 63.10(b), the Permittee must maintain records of:
[40 CFR 63.1517(b)]
- (1) For each affected source and emission unit with emissions controlled by a fabric filter or a lime injected fabric filter:
- (a) 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
- (b) 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.
- (c) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test or records of all ASTM D7520-13 observations (incorporated by reference, see § 63.14), including data sheets and all raw unaltered JPEGs used for opacity determination, 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.

- (2) For each affected source with emissions controlled by an afterburner:
 - (a) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and
 - (b) Records of annual afterburner inspections.
- (3) For the Decoater Furnace and 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.
- (4) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
 - (a) 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;
 - (b) 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.

- (c) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements, 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).
- (5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line degasser, 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.
- (6) For each continuous monitoring system, records required by § 63.10(c).
- (7) 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.
- (8) 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.
- (9) For each in-line degasser for which the Permittee has certified that no reactive flux was used:
 - (a) Operating logs which establish that no source of reactive flux was present at the in-line degasser;
 - (b) Labels required to establish that no reactive flux may be used at the in-line degasser; or
 - (c) Operating logs which document each flux gas, agent, or material used during each operating cycle.
- (10) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (11) 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.
- (12) Records for any approved alternative monitoring or test procedure.
- (13) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
- (a) OM&M plan; and
 - (b) Site-specific secondary aluminum processing unit emission plan (if applicable).
- (14) 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.
- (15) For any failure to meet an applicable standard, the Permittee shall maintain the following records;
- (a) 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.
 - (b) 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.
- (16) For each period of startup or shutdown for which the Permittee chooses to demonstrate compliance for an affected source, Permittee shall comply with Conditions II.I.10.d(16)(a) or (b) below.
- (a) 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 shall submit a semiannual

report in accordance with 40 CFR 63.1516(b)(2)(vii) or maintain the following records:

- (i) The date and time of each startup and shutdown;
 - (ii) The quantities of feed/charge and flux introduced during each startup and shutdown; and
 - (iii) The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or
- (b) To demonstrate compliance based on performance tests, the Permittee shall maintain the following records:
- (i) The date and time of each startup and shutdown;
 - (ii) The measured emissions in lb/hr or $\mu\text{g/hr}$ or ng/hr;
 - (iii) The measured feed/charge rate in tons/hr or Mg/hr from your most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and
 - (iv) An explanation to support that such conditions are considered representative startup and shutdown operations.

e. Permit Shield

Compliance with Condition II.I.10 shall be deemed compliance with 40 CFR 63.1517(a) and (b).

[A.A.C. R18-2-325]

III. LIME SILO REQUIREMENTS

A. Applicability

This Section applies to the lime silo listed in Attachment "C".

B. Particulate Matter and Opacity

1. Emissions Limitations and Standards

- a. The Permittee shall not cause, allow or permit the emission of particulate matter into the atmosphere from the lime silo in excess of the amounts calculated by one of the following equations:

- (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emission rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.
 [A.A.C. R18-2-730.A.1.a]

- (2) For process sources having a process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where “E” and “P” are defined as indicated in Condition III.B.1.a(1).

[A.A.C. R18-2-730.A.1.b]

- (3) For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.B]

2. Air Pollution Control Requirement

The Permittee shall, to the extent practicable, operate and maintain the Bin Vent Filter to control particulate matter emissions in a manner consistent with good air pollution control practices.

[A.A.C. R18-2-331.A.3.e]

[Material Permit Conditions are indicated with underlines and italics]

C. Opacity Requirements

1. Emission Limitation and Standards

The Permittee shall not cause to be discharged into the atmosphere from the lime silo any gases which exhibit greater than 20% opacity, measured in accordance with EPA Reference Method 9. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.B and C]

2. Monitoring, Recordkeeping and Reporting Requirements

In accordance with the procedures described in Condition I.A of this Attachment, the Permittee shall monitor emissions from the lime silo once per month when in operation.

[A.A.C. R18-2-306.A.3.c]

D. Operational Requirements

1. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under the Permittee's control in such quantities or concentrations as to cause air pollution.

[A.A.C. R18-2-730.D]

2. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

[A.A.C. R18-2-730.F]

3. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property

[A.A.C. R18-2-730.G]

E. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-730.A, -730.B, 730.D, -730.F, and -730. G, R18-2-331.A, and R18-2-306.A.

[A.A.C. R18-2-325]

IV. EMERGENCY ENGINE REQUIREMENTS

A. Applicability

This Section applies to the emergency generator listed in Attachment "C."

B. Operating Requirements

If the emergency engine does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter prior to start-up of the engine.

[A.A.C. R18-2-306.A.3, A.A.C. R18-2-331.A.3.c, 40 CFR 60.4247(c)]

[Material Permit Conditions are indicated by underline and italics]

C. Emission Standards

1. The Permittee shall operate and maintain the emergency generator that achieves the emission standards as required by 40 CFR 60 Subpart JJJJ over the entire life of the engine.
[40 CFR 60.4234]
2. The Permittee shall comply with the emission standards listed in Table 1 of 40 CFR 60 Subpart JJJJ for the emergency generator.
[40 CFR 60.4233(d)]

D. Compliance Requirements

1. The Permittee shall keep records of conducted maintenance to demonstrate compliance and also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the emergency generator will not be considered out of compliance.
[40 CFR 60.4243(a)(1)]
2. The Permittee shall demonstrate compliance with Condition IV.C.2 by purchasing an engine certified according to procedures specified in 40 CFR Subpart JJJJ, for the same model year and demonstrating compliance according to the method specified in Condition IV.D.1.
[40 CFR 60.4243(b)]
3. The Permittee shall operate the emergency generator according to the requirements in Condition IV.D.3.a through c below. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions IV.D.3.a through c below, is prohibited. If the Permittee does not operate the engine according to the requirements in Conditions IV.D.3.a through c below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.
[40 CFR 60.4243(d)]
 - a. There is no time limit on the use of emergency generator in emergency situations.
 - b. The Permittee may operate emergency generator for any combination of the purposes specified in Conditions IV.D.3.b(1) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IV.D.3.c counts as part of the 100 hours per calendar year allowed by Condition IV.D.3.b(1) below.
 - (1) The emergency generator 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 Director for approval of additional hours to be used

IV. EMERGENCY ENGINE REQUIREMENTS

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.

c. The emergency generator may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition IV.D.3.c(1) below. Except as provided in Condition IV.D.3.a, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(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 following conditions are met:

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.

E. Notification, Reporting, and Recordkeeping Requirements

1. The Permittee operating an applicable stationary SI ICE shall meet the following recordkeeping requirements:

[40 CFR 60.4245(a)]

V. COOLING TOWER REQUIREMENTS

- a. Records of all notifications submitted to comply with this Section and all documentation supporting any notification.
 - b. Maintenance conducted on the engine.
 - c. Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
2. If the emergency generator does not meet the standards applicable to non-emergency engines, the Permittee must 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.

[40 CFR 60.4245(b)]

F. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with 40 CFR 60.4237(a), 60.4234, 60.4233(d), 60.4243(a)(1), 60.4243(b), 60.4243(d), 60.4245(a), and 60.4245(b).

[A.A.C. R18-2-325]

V. COOLING TOWER REQUIREMENTS

A. Applicability

The Section applies to the cooling towers listed in the Equipment List in Attachment “C” of this permit.

B. Particulate Matter and Opacity

1. Emissions Limitations and Standards

- a. The Permittee shall not cause, allow or permit the emission of particulate matter into the atmosphere from each of the cooling towers in excess of the amounts calculated by one of the following equations:

- (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emission rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.
[A.A.C. R18-2-730.A.1.a]

- (2) For process sources having a process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where “E” and “P” are defined as indicated in Condition V.B.1.a(1).

[A.A.C. R18-2-730.A.1.b]

- (3) For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.B]

C. Opacity Requirements

1. Emission Limitation and Standards

The Permittee shall not cause to be discharged into the atmosphere from the cooling towers any gases which exhibit greater than 20% opacity, measured in accordance with EPA Reference Method 9. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.B and C]

2. Monitoring, Recordkeeping and Reporting Requirements

In accordance with the procedures described in Condition I.A of this Attachment, the Permittee shall monitor emissions from the cooling towers once per month when in operation.

[A.A.C. R18-2-306.A.3.c]

D. Permit Shield

[A.A.C. R18-2-325]

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. A.A.C. R18-2-702.B.3, -C, and R18-2-730.A.1, -B, -D and -G and R18-2-306.A.3.

VI. SOW DRYER, FILTER PREHEATER BOX, DROSS HOUSE, AND DROSS PRESS REQUIREMENTS

A. Applicability

The Section applies to the sow dryer, filter preheater box, dross house, and dross press listed in the Equipment List in Attachment “C” of this permit.

B. Particulate Matter and Opacity

1. Emissions Limitations and Standards

- a. *The Permittee shall limit the emissions of PM₁₀ to 1.05 pounds per hour and PM_{2.5} to 0.87 pounds per hour from the Dross House Baghouse.*

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition identified by underline and italics]

- b. The Permittee shall not cause, allow or permit the emission of particulate matter into the atmosphere from stacks in excess of the amounts calculated by one of the following equations:

- (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emission rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C. R18-2-730.A.1.a]

- (2) For process sources having a process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where "E" and "P" are defined as indicated in Condition VI.B.1.b(1).

[A.A.C. R18-2-730.A.1.b]

- (3) For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.B]

2. Air Pollution Control Requirements

- a. *The Permittee shall, to the extent practicable, operate and maintain the Dross House Baghouse and the Dross Press integral filtration unit to control particulate matter emissions in a manner consistent with good air pollution control practices.*

[A.A.C. R18-2-331.A.3.d and e]

[Material Permit Conditions are indicated with underlines and italics]

- b. *At all times when the is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain, and operate low NO_x burners with good air pollution control practice for minimizing NO_x emissions.*

[A.A.C. R18-2-331.A.3.c and d]

[Material Permit Conditions are indicated with underlines and italics]

3. Performance Testing Requirements

- a. The Permittee shall demonstrate compliance with Condition VI.B.1.a above by following EPA Reference Method 201A in conjunction with EPA Reference Method 202. In lieu of Method 201A and with prior approval from ADEQ, Method 5 can be used followed by particle size speciation.

[A.A.C. R18-2-306.A.3.c and -312]

- b. The initial performance test required by Condition VI.B.3.a above shall be performed within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source.

[A.A.C. R18-2-312]

- c. The Permittee shall conduct subsequent performance test(s) for the source on an annual basis (between 11 and 13 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

- d. If the result of the performance test required by Condition VI.B.3.b or c above is less than or equal to 70% of the applicable emission limitation, no further testing is required during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- e. If the result of any performance test required by Condition VI.B.3.b or c above is greater than 70% of the applicable, the Permittee shall conduct subsequent performance test(s) on an annual basis (between 11 and 13 months from the date of the previous performance test).

[A.A.C. R18-2-306.A.3.c and -312]

C. Opacity Requirements

1. Emission Limitation and Standards

The Permittee shall not cause to be discharged into the atmosphere from the stacks any gases which exhibit greater than 20% opacity, measured in accordance with EPA Reference Method 9. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.B and C]

2. Monitoring, Recordkeeping and Reporting Requirements

In accordance with the procedures described in Condition I.A of this Attachment, the Permittee shall monitor emissions from the stacks once per month when in operation.

[A.A.C. R18-2-306.A.3.c]

D. Volatile Organic Compounds

1. Emission Limitations and Standards

a. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[A.A.C. R18-2-730.D]

b. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

E. Permit Shield

[A.A.C. R18-2-325]

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. A.A.C. R18-2-702.B.3, -C, and R18-2-730.A.1, -B, -D and -G, R18-2-306.A, -B, R18-2-312, and R18-2-331.A.3.

VII. GASOLINE STORAGE TANK AND DISPENSING FACILITY REQUIREMENTS

A. Applicability

The Section is applicable to the gasoline storage tank and dispensing facility listed in the Equipment List in Attachment "C" of this permit.

B. Storage Tank

1. Gasoline storage tank shall be equipped with a submerged filling device, or acceptable equivalent, for control of hydrocarbon emissions.

[A.A.C. R18-2-710.B]

2. All pumps and compressors that handle gasoline shall be equipped with mechanical seals or other equipment of equal efficiency to prevent release of organic contaminants into the atmosphere.

[A.A.C. R18-2-710.D]

C. Monitoring and Recordkeeping Requirements

1. The Permittee shall, for the gasoline storage tank, maintain a file of the typical Reid vapor pressure of gasoline stored and of dates of storage. Dates on which the storage vessel is empty shall be shown.
[A.A.C. R18-2-710.E.1]
2. If the stored gasoline has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia), and is stored in a storage vessel other than one equipped with a vapor recovery system or its equivalent, the Permittee shall determine and record the average monthly temperature, and true vapor pressure of gasoline stored at such temperature.
[A.A.C. R18-2-710.E.2.b]
3. The average monthly storage temperature shall be an arithmetic average calculated for each calendar month, or portion thereof, if storage is for less than a month, from bulk liquid storage temperature determined at least once every seven days.
[A.A.C. R18-2-710.E.3]
4. The true vapor pressure shall be determined by the procedures in American Petroleum Institute Bulletin 2517, amended as of February 1980 (and no future editions), which is incorporated herein by reference and on file with the Office of the Secretary of State. This procedure is dependent upon determination of the storage temperature and the Reid vapor pressure, which requires sampling of the petroleum liquids in the storage vessels. Unless the Director requires in specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For those liquids for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For other liquids, supporting analytical data must be made available upon request to the Director when typical Reid vapor pressure is used.
[A.A.C. R18-2-710.E.4]

D. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-710.B, D, E.1, E.2, E.3 and E.4.

[A.A.C. R18-2-325]

VIII. DIESEL STORAGE TANK AND DISPENSING FACILITY REQUIREMENTS

A. Applicability

The Section is applicable to the diesel storage tank and dispensing facility listed in the Equipment List in Attachment "C" of this permit.

B. Volatile Organic Compounds (VOCs)

1. Diesel fuel shall be stored, used, and transported in such a manner and by means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or

discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

[A.A.C. R18-2-730.F]

2. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

C. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-730.F and G.

[A.A.C. R18-2-325]

IX. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section applies to any non-point source of fugitive dust in the facility.

B. Particulate Matter and Opacity

Open Areas, Roadways & Streets, Storage Piles, and Material Handling

1. Emission Limitations and Standards

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

[A.A.C. R18-2-614]

- b. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

- (1) For a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, keep dust and other types of air contaminants to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

- (2) Keep dust to a minimum from vacant lots or an urban or suburban open area where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by

IX. FUGITIVE DUST REQUIREMENTS

paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

- (3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

- (4) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits;

[A.A.C. R18-2-605.B]

- (5) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust;

[A.A.C. R18-2-606]

- (6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored;

[A.A.C. R18-2-607.A]

- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents in such a manner as to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C. R18-2-607.B]

- (8) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition IX.B.1.b above were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]

- b. Opacity Monitoring Requirements

Each month, the Permittee shall monitor visible emissions from fugitive sources in accordance with Condition I.A.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-604, -605, -606, -607 and -614.

[A.A.C. R18-2-325]

X. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations and Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

[A.A.C. R18-2-726]

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirements

a. Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

[A.A.C. R18-2-306.A.3.c]

- (1) The date the project was conducted;
- (2) The duration of the project; and
- (3) Type of control measures employed.

b. Each time an abrasive blasting project is conducted, the Permittee shall monitor visible emissions from the project in accordance with Condition I.A of Attachment "B".

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with Condition X.A.1 shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

[A.A.C. R18-2-325]

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations and Standards

(1) While performing spray painting operations, the Permittee shall comply with the following requirements:

(2) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C. R18-2-727.A]

(3) The Permittee or their designated contractor shall not either:

[A.A.C. R18-2-727.B]

(a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

(b) Thin or dilute any architectural coating with a photochemically reactive solvent.

(4) For the purposes of Condition X.A.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions (a) thru (c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

[A.A.C. R18-2-727.C]

(a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

[A.A.C. R18-2-727.C.1]

(b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

[A.A.C. R18-2-727.C.2]

X. OTHER PERIODIC ACTIVITIES

- (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C. R18-2-727.C.3]

- (5) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition X.B.1.a(4), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C. R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

[A.A.C. R18-2-306.A.3.c]

- (1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed;
- (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.

- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition X.B.1.b(1).

c. Permit Shield

Compliance with Condition X.B.1.a shall be deemed compliance with A.A.C. R18-2-727.

[A.A.C. R18-2-325]

2. Opacity

a. Emission Limitation and Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

b. Monitoring, Recordkeeping and Reporting Requirements

Each time a spray painting project is conducted, the Permittee shall monitor visible emissions in accordance with Condition I.A of Attachment “B”.

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with Condition X.B.2.a shall be deemed compliance with A.A.C. R18-2-702.B.3.

[A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation and Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M for National Emissions Standards for Hazardous Air Pollutants - Asbestos.

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirements

The Permittee shall keep all required records in a file. The required records shall include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with Condition X.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

[A.A.C. R18-2-325]

XI. AMBIENT AIR MONITORING REQUIREMENTS

[A.A.C. R18-2-306.A.3.d]

A. General Requirements

[A.A.C. R18-2-306.A.3.c]

1. At least 120 days prior to startup, the Permittee shall submit to the Director for approval a written quality assurance project plan (QAPP) for the meteorological and HCl monitoring network. The QAPP shall contain, at a minimum, the procedures and activities needed to guarantee the reliability and validity of the data collected by the monitoring network and shall conform to EPA’s Quality Assurance Project Plan Standard (EPA Directive No: CIO 2105-S-02.1) and to the applicable sections of EPA’s Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements.
2. Prior to the startup of operations, the Permittee shall install, operate, and maintain the meteorological and HCl monitor network at locations approved by ADEQ and as prescribed in the written and approved QAPP.

B. Reporting and Recordkeeping Requirements

[A.A.C. R18-2-306.A.3.c]

1. The Permittee shall retain all records in accordance with Condition XII of Attachment "A". These shall be available upon request to ADEQ.
2. The QAPP shall specify the format, frequency, and content of data reports that will be provided to ADEQ.
3. The Permittee may submit reports electronically to ADEQ.

C. Meteorological and HCl Monitoring Requirements

[A.A.C. R18-2-306.A.3.c]

1. The monitors shall be installed, maintained, and operated in accordance with the written and approved QAPP.

2. Sampling Frequency

The Permittee shall operate the monitors and sample at a frequency as stated in the written and approved QAPP in accordance with Condition XI.A.1 of Attachment "B".

3. Monitoring Quality Assurance/Quality Control

The Permittee shall conduct quality assurance activities as stated in the written and approved QAPP in accordance with Condition XI.A.1 of Attachment "B".

4. Monitoring Reporting Requirements

The Permittee shall provide reports as stated in the written and approved QAPP in accordance with Condition XI.A.1 of Attachment "B".

D. Action Levels and Response Procedures for Ambient HCl Concentrations Above Action Levels

1. The Permittee shall calculate the monitored hourly average HCl value in accordance with the written and approved QAPP.
2. If the average hourly ambient HCl concentration at any monitoring location is greater than 2.0 mg per cubic meter, the Permittee shall:
 - a. Notify the Director by electronic mail within 24 hours of discovery.
 - b. Begin a root cause analysis within 48 hours of exceeding this threshold and initiate and implement remedial measures, as necessary and expeditiously, to reduce average hourly ambient concentrations at each impacted monitor below 2.0 mg per cubic meter.

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- c. Notify the Director within 3 days of returning average hourly ambient concentrations below 2.0 mg per cubic meter. The notification shall provide details on all mitigation measures undertaken.
 3. If the average hourly HCl concentration is greater than 2.5 mg per cubic meter, the Permittee shall, in addition to the above:
 - a. Immediately cease all HCl-generating activities.
 - b. Restart facility operations only after appropriate corrective action has been taken to target ambient concentrations at the community to stay below 2 mg per cubic meter.
 - c. Provide a notification to the Director within 24 hours of restart. The notification shall provide details on all mitigation measures undertaken.

EQUIPMENT LIST

ATTACHMENT "C": EQUIPMENT LIST

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
SCRAP PROCESSING							
Scrap Processing System #1	33 ton/hr	TBD	TBD	TBD	TBD	001-1	A.A.C. 730 NESHAP 40 CFR Subpart RRR
MELTING AND CASTING							
Decoater Furnace #1	27.6 ton/hr 30.2 MMBtu/hr	G&P	TBD	TBD	TBD	002-1, 002-2	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR
Melting Furnace #1	14.3 ton/hr 38.0 MMBtu/hr	G&P	TBD	TBD	TBD	003-1, 003-2	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR
Melting Furnace #2	14.3 ton/hr 38.0 MMBtu/hr	G&P	TBD	TBD	TBD	003-1, 003-2	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR
Holding Furnace #1	34.4 ton/hr 30.0 MMBtu/hr	G&P	TBD	TBD	TBD	005-1,005-2	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR
In-Line Degasser #1	34.4 ton/hr	TBD	TBD	TBD	TBD	006-1	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR
Sow Dryer	4.8 ton/hr	G&P	TBD	TBD	TBD	007-1	A.A.C. 730
Filter Box Preheater	0.18 MMBtu/hr	TBD	TBD	TBD	TBD	010-10	A.A.C. 730
Dross House	1.4 ton/hr	TBD	TBD	TBD	TBD	008-1, 008-2	A.A.C. 730
Dross Press	1.4 ton/hr	TBD	TBD	TBD	TBD	009-1	A.A.C. 730
BAGHOUSES							
Cold Baghouse #1	90,885 scfm	ETA Engineering	TBD	TBD	TBD	BH1	A.A.C. 730 NESHAP 40 CFR 63 Subpart RRR

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Hot Baghouse #1	71,704 scfm	ETA Engineering	TBD	TBD	TBD	BH2	A.A.C. R18-2-730 NESHAP 40 CFR 63 Subpart RRR
Hot Baghouse #2	69,474 scfm	ETA Engineering	TBD	TBD	TBD	BH3	A.A.C. R18-2-730 NESHAP 40 CFR 63 Subpart RRR
Hot Baghouse #3	104,211 scfm	ETA Engineering	TBD	TBD	TBD	BH4	A.A.C. R18-2-730 NESHAP 40 CFR Subpart RRR
Dross House Baghouse	64,918 scfm	ETA Engineering	TBD	TBD	TBD	BH5	A.A.C. R18-2-730
COOLING TOWERS							
Cooling Tower 1	3,500 gpm	TBD	TBD	TBD	TBD	011-1	A.A.C. R18-2-730
Cooling Tower 2	1,500 gpm	TBD	TBD	TBD	TBD	012-1	A.A.C. R18-2-730
EMEGENCY GENERATOR							
Emergency Generator 1	26 kW	Kohler	CH 1006 4-Cycle	TBD	TBD	N/A	NESHAP 40 CFR Subpart ZZZZ NSPS 40 CFR 60 Subpart JJJJ
SILOS AND STORAGE BINS							
Lime Silo	0.075 ton/hr	APC Systems	TBD	TBD	TBD	013-1	A.A.C. R18-2-730
FUEL TANKS							
Diesel Storage Tank	1,000 gal	Convault	TBD	TBD	TBD	N/A	A.A.C. R18-2-730
Gasoline Storage Tank	500 gal	Convault	TBD	TBD	TBD	N/A	A.A.C. R18-2-710
DISPENSING FACILITIES							
Diesel Dispensing Facility	5,209 gal/hr	TBD	TBD	TBD	TBD	N/A	A.A.C. R18-2-730
Gasoline Dispensing Facility	417 gal/hr	TBD	TBD	TBD	TBD	N/A	A.A.C. R18-2-710