

# Air Quality

## PERMIT TO CONSTRUCT

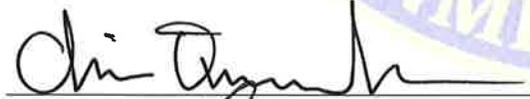
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**Permittee** Real Alloy Recycling LLC  
**Permit Number** P-2009.0139  
**Project ID** 62352  
**Facility ID** 055-00031  
**Facility Location** 16168 West Prairie Avenue  
Post Falls, ID 83854

### Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

**Date Issued** January 2, 2020



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**Chris Duerschner, Permit Writer**



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**Mike Simon, Stationary Source Manager**

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# 1 Permit Scope

## Purpose

- 1.1 This is a revised Permit to Construct to align a monitoring and recordkeeping requirement with its underlying operating requirement.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-2009.0139, issued on December 6, 2019.

[01/02/2020]

## Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2 & 4	<u>Rotary Furnace #3 (RF3):</u> RF3 was previously referred to as Furnace #1 for a period of years prior to the 2015 permit revision.  Manufacturer: IMSAMET of Idaho Heat input rating: 27 MMBtu/hr Maximum Capacity: 300,000 lb feed charge/day Date of Construction: 1999	<u>RF3 Baghouse (RFB3):</u> 98% control of PM/PM <sub>10</sub>
	<u>Rotary Furnace #6 (RF6):</u> Manufacturer: IMSAMET of Idaho Heat input rating: 27 MMBtu/hr Maximum Capacity: 300,000 lb feed charge/day Date of Construction: 2015	<u>RF6 Baghouse (RFB6):</u> 98% control of PM/PM <sub>10</sub>
	<u>Salt Cake Staging and Handling (SKSG) – RF3</u> Maximum capacity: 100,000 lb feed charge/day Date of construction: 1999	Baghouse #9 (BH9)
	<u>Salt Cake Staging and Handling (SKSG) – RF6</u> Maximum capacity: 100,000 lb feed charge/day	Baghouse #8 (BH8)
3 & 4	<u>Crucible Cleaning</u> Maximum Operation: 60 operations per year	Baghouse #8 (BH8)
	Scrap Receiving and Hauling	Reasonable controls
	Dross Receiving and Hauling	Reasonable controls

## 2 Rotary Furnaces and Salt Cake Processes

### 2.1 Process Description

The facility operates two rotary furnaces and associated environmental control equipment. The rotary furnaces are used to melt and extract aluminum from aluminum scrap and aluminum dross. Dross is slag from the aluminum melting and refining operations consisting of fluxing agents, impurities, oxidized and non-oxidized aluminum and/or pre-consumer aluminum scrap. These are defined as Group 1 furnaces (40 CFR 63 Subpart RRR) and all emissions are directed to Trona-injected baghouses. The baghouses are equipped with a bag leak detection system. The regulated pollutants from the emission units include criteria pollutants, dioxins and furans (D/F) and fluoride.

Dross and scrap aluminum come to the facility from several sources. Dross is brought to the dross recovery facility by dump trucks and stored inside buildings until needed. Dross is transferred from storage piles located inside the dross recovery building to the rotary furnace where it is smelted. Scrap aluminum is brought to the facility by dump trucks and stored in outdoor piles until needed. Scrap aluminum is transferred from outdoor storage piles to the rotary furnace where it is melted. The furnace is fired by natural gas. Salt flux is added into the furnaces via mobile equipment. Once the melting cycle is complete, the molten metal is poured by rotary furnaces into sow molds where it is cast, or is transported in crucibles as molten aluminum for direct product shipment.

After the aluminum is tapped, the salt is poured out of the furnace into salt cake pans and placed under a hood adjacent to the furnace. After cooling, the salt cake is moved to under roof storage bins and/or loaded into tubs that are used to load dump trucks where it is trucked to an approved landfill for disposal.

The facility currently operates a 158 horsepower (HP) diesel-fired emergency generator used to power an electric fire pump. The engine is exempt from state permitting requirements pursuant to IDAPA 58.01.222.01.d. The engine is subject to the area source requirements of 40 CFR 63, Subpart ZZZZ, and these requirements are not included in this permit.

[05/06/2015]

## 2.2 Control Device Descriptions

**Table 2.1 Rotary Furnaces and Salt Cake Processes Description**

Emissions Units / Processes	Control Devices	Emission Points
Rotary Furnace #3 (RF3)	RF3 Baghouse (RFBH3) 98% control of PM/PM <sub>10</sub>	RFBH3 Stack
Rotary Furnace #6 (RF6)	RF6 Baghouse (RFBH6) 98% control of PM/PM <sub>10</sub>	RFBH6 Stack
Salt Cake Staging and Handling – RF3	Baghouse #9 (BH9) 99% control of PM/PM <sub>10</sub>	BH9 Stack
Salt Cake Staging and Handling – RF6	Baghouse #8 (BH8) 99% control of PM/PM <sub>10</sub>	BH8 Stack

## Emission Limits

### 2.3 Emission Limits

The PM<sub>10</sub> and NO<sub>x</sub> emissions from RF3 and RF6 shall not exceed any corresponding emission rate limit listed in the following table.

**Table 2.2 Rotary Furnace Emission Limits<sup>(a)</sup>**

Source Description	PM <sub>10</sub> <sup>(b)</sup>		NO <sub>x</sub>		Total Fluoride	
	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>
RF3	1.74	7.60	3.66	16.03	0.22	0.96
RF6	1.16	5.07	2.44	10.68	0.14	0.62

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.

### 2.4 Fluoride Limits

The combined total particulate fluoride and gaseous fluoride emissions shall not exceed 0.22 pounds per hour (lb/hr) and 0.96 tons per year (T/yr) for RF3 and 0.14 pounds per hour (lb/hr) and 0.62 tons per year (T/yr) for RF6.

[05/06/2015]

### 2.5 Feed Charge Limits

The feed charge for RF3 shall not exceed 175 tons per day on a monthly average. The feed charge for RF3 shall not exceed 63,875 tons per year (T/yr). The feed charge for RF6 shall not exceed 125 tons per day on a monthly average. The feed charge for RF6 shall not exceed 45,630 tons per year (T/yr).

[12/06/2019]

## 2.6 Opacity Limit

Emissions from the RF3 stack, the RF6 stack, or any other stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[05/06/2015]

## 2.7 40 CFR 63, Subpart RRR – Emissions Standards

The permittee shall comply with all applicable emissions limitations of the National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production, 40 CFR 63, Subpart RRR, in accordance with IDAPA 58.01.01.107 and IDAPA 58.01.01.210.20-21.

- Emission Standards: 40 CFR 63.1505(a), 40 CFR 63.1505(i)(3), and 40 CFR 63.1505(k)(3) and Table 1 to Subpart RRR of 40 CFR 63.
- 15 µg of dioxins and furans (D/F) (TEQ) per Mg ( $2.1 \times 10^{-4}$  grams of D/F TEQ per ton) of feed/charge from a group 1 furnace, in accordance with 40 CFR 63.1505(i)(3). This limit does not apply if the furnace processes only clean charge.
- The permittee shall comply with the emission limit calculated using the equation for D/F for each secondary aluminum processing unit, in accordance with 40 CFR 63.1505(k)(3). The permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{c_{D/F}} = \frac{\sum_{i=1}^N (L_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^N (T_{ti})}$$

Where,

$L_{ti_{D/F}}$  = The D/F emission limit for individual emission unit  $i$  for a group 1 furnace; and

$L_{c_{D/F}}$  = The D/F emission limit for the secondary aluminum processing unit

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

(note: clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.)

- In accordance with 40 CFR 63.1505(k)(5), the permittee may demonstrate compliance with the emission limit by demonstrating that each emission unit is in compliance with the emission limit in 40 CFR 63.1505(i)(3).

[05/06/2015]

## Operating Requirements

### 2.8 Baghouse Control of Salt Cake Staging and Handling

The permittee shall control emissions from the salt cake staging and handling for RF3 by operating a baghouse with a minimum control efficiency of 98% for PM<sub>10</sub>. The permittee shall control emissions from the salt cake staging and handling for RF6 by operating a baghouse with a minimum control efficiency of 98% for PM<sub>10</sub>.

[12/06/2019]

- 2.9 The permittee shall comply with the Air Pollution Emergency Rules in IDAPA 58.01.01.550-562.
- 2.10 The permittee shall monitor and record the following information and a compilation of the most recent five years of records shall be kept on site and shall be made available to DEQ representatives upon request.
- Baghouse maintenance documentation, including frequency of cleaning and number of baghouse section cleaned.

**2.11 40 CFR 63, Subpart RRR – Operating Requirements**

The permittee shall comply with all applicable operating requirements of 40 CFR 63, Subpart RRR, in accordance with IDAPA 58.01.01.107 and IDAPA 58.01.01.221.20-21. The permittee shall operate all new and existing affected sources and control equipment (Table 1.1) according to the requirements of 40 CFR 63, Subpart RRR, in accordance with 40 CFR 63.1506.

- Operating Requirements: 40 CFR 63.1506 and Table 2 of Subpart RRR of 40 CFE 63.
- *Labeling.* The permittee shall provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, in accordance with 40 CFR 63.1506(b) as follows:
  - The type of affected source or emission unit (e.g. scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
  - The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., operating parameter ranges and requirements as incorporated in the Operation, Maintenance, and Monitoring (OM&M) plan.
- *Capture/collection systems.* For each affected source or emission unit equipped with an add-on air pollution control device, the permittee shall comply with 40 CFR 63.1506(c) as follows:
  - Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in Chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice”;
  - 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
  - Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
- *Feed/charge weight.* For each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge, the permittee shall comply with 40 CFR 63.1506(d) as follows:
  - Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
  - Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

- The owner or operator 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 (i) the aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and (ii) all calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
- *Group 1 furnace with add-on air pollution control devices.* For each group 1 furnace with emissions controlled by a lime-injected fabric filter, the permittee shall comply with 40 CFR 63.1506(m) as follows:
  - If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the permittee shall: (i) initiate corrective action within 1 hour of a bag leak detection system alarm; (ii) complete the corrective action procedures in accordance with the OM&M plan; (iii) operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
  - If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, the permittee shall: (i) initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and (ii) complete the corrective action procedures in accordance with the OM&M plan.
  - Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the D/F performance test, plus 14 °C (plus 25°F). This maximum baghouse inlet temperature shall be maintained in the OM&M plan.
  - 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 D/F performance test. This maximum flux injection rate shall be maintained in the OM&M plan.
  - Operate each sidewall furnace such that: (i) the level of molten metal remains above the top of the passage between the sidewall and hearth during reactive flux injection, unless emissions from both the sidewall and the hearth are included in demonstrating compliance with all applicable emission limits; (ii) reactive flux is added only in the sidewall, unless emissions from both the sidewall and the hearth are included in demonstrating compliance with all applicable emission limits.
- *Corrective Action.* When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the D/F performance test and incorporated in the OM&M plan, the permittee shall initiate corrective action in accordance with 40 CFR 63.1506(p). Corrective action must restore operation of the affected source of emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

[05/06/2015]

## Monitoring and Recordkeeping Requirements

### 2.12 Feed Charge Tracking

The permittee shall monitor and record, each day when operating, the amount of feed charge in pounds per day for RF3. The permittee shall monitor and record, each day when operating, the amount of feed charge in pounds per day for RF6. The daily amounts shall be averaged monthly, and then each month's amount of feed charge shall be summed over the previous consecutive 12-month period.

[01/02/2020]

### 2.13 40 CFR 63, Subpart RRR – Monitoring and Compliance Requirements

The permittee shall comply with all applicable monitoring and compliance requirements in 40 CFE 63, Subpart RRR. The permittee shall monitor all control equipment and processes according to the requirements of 40 CFR 63, Subpart RRR, in accordance with 40 CFR 63.1510. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to 40 CFR 63, Subpart RRR.

- *OM&M Plan (40 CFR 63.1510(b)).* The permittee shall prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The permittee of an existing affected source must submit the OM&M plan to the responsible permitting authority no later than the compliance date established by 40 CFR 63.1510(a). The permittee of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under 40 CFR 63.1511(b), or within 90 days after the compliance date established by 40 CFR 63.1501(b), if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The permittee shall comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority 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 permitting authority. Each plan must contain the following information:
  - 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.
  - A monitoring schedule for each affected source and emission unit.
  - Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
  - Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: (i) calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and (ii) procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

- Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
  - Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of §63.1510, including: (i) procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and (ii) procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- *Labeling (40 CFR 63.1510(c)).* The permittee shall inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
- *Capture/collection system (40 CFR 63.1510(d)).* The permittee shall:
  - Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on pollution control device; and
  - Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
- *Feed charge/weight (40 CFR 63.1510(e)).* The permittee of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge shall install, calibrate, operate and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the permittee may use a procedure acceptable to DEQ to determine the total weight of feed/charge or aluminum production to the affected source of emission unit.
  - 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.
  - The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- *Fabric filters and lime-injected fabric filters (40 CFR 63.1510(f)).* The permittee of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart shall install, calibrate, maintain, and continuously operate a bag leak detection system or a continuous opacity monitoring system. The permittee of an aluminum scrap shredder must install and operate a bag leak detection system, install and operate a continuous opacity monitoring system, or conduct visible emission observations.
  - These requirements apply to the owner or operator of a new or existing affected source or existing unit using a bag leak detection system: (i) the permittee shall install and operate

a bag leak detection system for each exhaust stack of a fabric filter; (ii) each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations; (iii) the bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less; (iv) the bag leak detection system sensor must provide output of relative or absolute PM loadings; (v) the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor; (vi) the bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel; (vii) for positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter; (viii) where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors; (ix) 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; (x) following initial adjustment of the system, the permittee shall not adjust 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 of a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

- These requirements apply to the owner or operator of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system: (i) the permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack; (ii) each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60.
- These requirements apply to the owner or operator of a new or existing aluminum scrap shredder who conducts visible emission observations. The owner or operator shall: (i) perform a visible emission 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 (ii) record the results of each test.
- *Fabric filter inlet temperature (40 CFR 63.1510(h)).* These requirements apply to the owner or operator of a scrap dryer/delacquering kiln/decoating kiln or group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart.
  - 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.
  - The temperature monitoring device must meet each of these performance and equipment specifications: (i) the monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period;

- (ii) the recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n); (iii) the reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- *Lime injection (40 CFR 63.1510(i)).* These requirements apply to the owner or operator of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of this subpart.
    - The permittee shall verify that lime is always free-flowing by either:
      - (i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective actions results in no further blockages of lime during the 3-day period; or
      - (ii) Subject to the approval of DEQ, 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 if found not to be free-flowing, the permittee must promptly initiate and complete corrective action; or
      - (iii) Subject to the approval of DEQ, installing operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the permittee must promptly initiate and complete corrective action.
    - The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.
    - An owner or operator who intermittently adds lime to a lime coated fabric filter must obtain approval from DEQ for a lime addition monitoring procedure. DEQ will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.
  - *Total reactive flux injection rate 40 CFR 63.1510(j)).* These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. 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. (i) the monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test; (ii) the accuracy of the weight measurement device must be  $\pm 1$  percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of  $\pm 1$  percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards; (iii) 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.

- 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 D/F performance test using the procedure in 40 CFR 63.1512(o).
  - Record, for each 15-minute block period during each operating cycle or time period used in the D/F performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of: (i) gaseous or liquid reactive flux other than chlorine; and (ii) solid reactive flux.
  - Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the D/F performance test using the procedure in 40 CFR 63.1512(o).
  - The permittee of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- *Site-specific requirements for secondary aluminum processing units (40 CFR 63.1510(s)).* The SAPUs at this facility include RF3 and RF6. This facility does not conduct “in-line fluxing.”
  - A permittee of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information: (i) the identification of each emission unit in the secondary aluminum processing unit; (ii) 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; (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; (iv) information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and (v) 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 40 CFR 63.1510(t).
  - The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: (i) any averaging among emissions of a differing pollutants; (ii) the inclusion of any affected sources other than emission units in a secondary aluminum processing unit; (iii) the inclusion of any emission unit while it is shutdown; or (iv) the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
  - 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 applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.
- *Secondary aluminum processing unit (40 CFR 63.1510(t)).* Except as provided in 40 CFR 63.1510(u), the permittee shall calculate and record the 3-day and 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:
  - 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 paragraph (e) of this section. If the owner or operator 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.

- 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.
- 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.
- Compute the 24-hour daily emission rate using Equation 4.

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i} \quad (Eq. 4)$$

Where,

$E_{day}$  = The daily PM, HCl, or 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.

- *Secondary aluminum processing unit compliance by individual emission unit demonstration (40 CFR 63.1510(u)).* As an alternative to the procedures of 40 CFR 63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

[05/06/2015]

## 2.14 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production, Subpart RRR.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[12/31/2009]

- 2.15 The permittee shall comply with the requirements of the monitoring and recordkeeping general provision.

[12/31/2009]

## Performance Testing Requirements

### 2.16 Supplemental NO<sub>x</sub> Performance Test

Within 180 days of the issuance of this PTC modification, the permittee shall notify DEQ of their intent to perform source tests for NO<sub>x</sub> on RF3 and RF6 to supplement the results of the engineering test performed on November 29, 2018. These source tests shall be performed in accordance with the General Provisions for Performance Testing of this permit and EPA Reference Method 7, and shall be conducted within 180 days of the issuance of this PTC modification.

[12/06/2019]

### 2.17 PM<sub>10</sub> Performance Tests

The permittee shall conduct a performance test to measure the PM<sub>10</sub> emissions from RF3 every five years. The permittee shall conduct a performance test to measure the PM<sub>10</sub> emissions from RF6 every five years. The performance tests shall be performed in accordance with the General Provisions for Performance Testing of this permit and EPA Reference Methods 5 and 202 described in 40 CFR 60, appendix A. Visible emissions shall be observed during the emission test using the methods specified in IDAPA 58.01.01.625. The operating feed charge weight rates (input) of the rotary furnaces shall be measured and recorded during the source test. All subsequent source tests shall be completed no later than July 15 of the testing year. RF3 was tested July 26, 2019, so the next test is required no later than July 15, 2024. RF6 was tested November 10-11, 2015, so the next test is required no later than July 15, 2020.

[12/06/2019]

### 2.18 Particulate Fluoride Performance Tests

The permittee shall conduct a performance test to measure gaseous and particulate fluoride compounds emissions from RF3 every five years. The permittee shall conduct a performance test to measure gaseous and particulate fluoride compounds emissions from RF6 every five years. The performance tests shall be performed in accordance with the General Provisions for Performance Testing of this permit and EPA Reference Methods 13A or 13B described in 40 CFR 60, Appendix A. Visible emissions shall be observed during the source test using the methods specified in IDAPA 58.01.01.625. The feed charge weight rates (input) of rotary furnaces shall be measured and recorded during the source test. RF3 was tested June 26, 2019, therefore the next test is required no later than June 15, 2024. RF6 was tested April 9, 2016, therefore the next test is required no later than July 15, 2021.

[12/06/2019]

### 2.19 40 CFR 63, Subpart RRR – Performance Test/Compliance Demonstration General Requirements

The permittee shall comply with all applicable performance test requirements in 40 CFR 63, Subpart RRR. The permittee shall perform all applicable performance tests according to the requirements of 40 CFR 63, Subpart RRR, in accordance with 40 CFR 63.1511.

- *Site-specific test plan (40 CFR 63.1511(a)).* Prior to conducting any performance test required, the permittee shall prepare a site-specific test plan which satisfies all of the

requirements, and must obtain approval of the plan pursuant to the procedures, set forth in §63.7(c).

- *Initial performance test (40 CFR 63.1511(b)).* Following approval of the site-specific test plan, the permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The permittee must conduct this initial performance test no later than the date for compliance established by §63.1501(a). The permittee must conduct this initial performance test within 90 days after the date for compliance established by §63.1501(b). Except for the date by which the performance test must be conducted, the permittee must conduct each performance test in accordance with the requirements and procedures set forth in §63.7(c). Permittees of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F.
  - The permittee must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
  - 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.
  - 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.
  - 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.
  - 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.
- *Test methods (40 CFR 63.1511(c)).* The permittee must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:
  - Method 1 for sample and velocity traverses
  - Method 2 for velocity and volumetric flow rate
  - Method 3 for gas analysis
  - Method 4 for moisture content of the stack gas
  - Method 5 for the concentration of PM
  - Method 9 for visible emission observations
  - Method 23 for the concentration of D/F
  - Method 25A for the concentration of THC, as propane

- Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system. Method 26 may be used in place of Method 26A where it can be demonstrated that there are no water droplets in the emission stream. This can be demonstrated by showing that the vapor pressure of water in the emission stream that you are testing is less than the equilibrium vapor pressure of water at the emission stream temperature, and by certifying that the emission stream is not controlled by a wet scrubber.
- *Establishment of monitoring and operating parameter values (40 CFR 63.1511(g)).* The permittee must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by §63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, permittee must use the appropriate procedures and submit the information required by §63.1515(b)(4) in the notification of compliance status report. The permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of DEQ:
  - The complete emission test report(s) used as the basis of the parameter(s) is submitted.
  - The same test methods and procedures as required by the subpart were used in the test.
  - 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.
  - All process and control equipment operating parameters required to be monitored were monitored as required in the subpart and documented in the test report.

[05/06/2015]

## 2.20 40 CFR 63, Subpart RRR – Performance Test/Compliance Demonstration Requirements and Procedures

The permittee shall comply with all applicable performance test requirements in 40 CFR 63, Subpart RRR. The permittee shall perform all compliance demonstration requirements and procedures according to the requirements of 40 CFR 63, Subpart RRR, in accordance with 40 CFR 63.1512, as applicable.

- *Group 1 furnace with add-on air pollution control devices (40 CFR 63.1512(d)).*
  - The permittee of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).
  - 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.
- *Secondary aluminum processing unit (40 CFR 63.1512(j)).* The permittee must conduct performance tests as described below. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and µg TEQ/Mg of

feed/charge for D/F emissions from each emission unit, as applicable. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t).

- *Feed/charge weight measurement (40 CFR 63.1512(k)).* During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.
- *Continuous opacity monitoring system (40 CFR 63.1512(l)).* The owner or operator of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the owner or operator must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test.
- *Inlet gas temperature (40 CFR 63.1512(n)).* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these procedures to establish an operating parameter value or range for the inlet gas temperature.
  - 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, as applicable;
  - Determine and record the 15-minute block average temperatures for the 3 test runs; and
  - Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.
- *Flux injection rate (40 CFR 63.1512(o)).* The permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.
  - 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, as applicable, 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;
  - Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
  - Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1W_1 + F_2W_2 \quad Eq. 5$$

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 flux that is chlorine (e.g.,  $F = 0.75$  for magnesium chloride); and

$W_2$  = Weight of solid reactive flux;

- Divide the weight of total chlorine usage ( $W_1$ ) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
- If the solid reactive flux other than magnesium chloride is used, the permittee must derive the appropriate proportion factor to approval by DEQ.
- *Lime (trona) injection (40 CFR 63.1512(p)).* The permittee of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests, as applicable, to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.
  - For continuous lime injection systems, ensure that lime, or trona, in the feed hopper or silo is free-flowing at all times; and
  - Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.
- *Bag leak detection system (40 CFR 63.1512(q)).* The permittee of an affected source or emission unit using a bag leak detection system must submit the information described in §63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in §63.1510(f).
- *Labeling (40 CFR 63.1512(r)).* The permittee of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in §63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(b).
- *Capture/collection system (40 CFR 63.1512(s)).* The permittee of a new or existing affected source or emission unit with an add-on control device must submit the information described in §63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(c).

## Reporting Requirements

### 2.21 40 CFR 63, Subpart RRR – Notifications, Reports, and Records

On and after the compliance date specified in 40 CFR 63.1501, the permittee shall comply with all applicable Notifications, Reports, and Records standards of 40 CFR 63, Subpart RRR. The permittee shall refer to the following sections in 40 CFR 63, Subpart RRR:

- *Initial notifications.* The permittee shall submit initial notifications to DEQ in accordance with 40 CFR 63.1515(a).
  - The permittee shall provide notification for any area source that subsequently increases its emissions such that the source is a major source, as required by 40 CFR 63.9(b)(1).
  - The permittee of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup and for which an application for approval of construction or reconstruction is not required under 40 CFR 63.5(d), shall provide notification that the source is subject to the standard, as required by 40 CFR 63.9(b)(3).



- The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
  - Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
  - The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
  - Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
  - If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
  - Manufacturer's specifications or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in 40 CFR 63.1505(e).
  - Manufacturer's specification or analysis documenting the design residence time of no less than 0.8 seconds and design operating temperature of no less than 1,600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.
  - The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
  - Startup, shutdown, and malfunction plan, with revisions.
- *Startup, shutdown, and malfunction plan/reports.* The permittee shall develop a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard, in accordance with 40 CFR 63.1516(a). The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
    - Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
    - Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
  - *Excess emissions/summary report.* The permittee shall submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3), in accordance with 40 CFR 63.1516(b). 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.

- A report must be submitted if any of these conditions occur during a 6-month reporting period:
    - (i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
    - (ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.
    - (iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
    - (iv) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
    - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
    - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
    - (vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
  - Each report must include each of these certifications, as applicable:
    - (i) For each thermal chip dryer: “Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.”
    - (ii) For each dross-only furnace: “Only dross and salt flux were used as the charge materials in any dross-only furnace during this reporting period.”
    - (iii) 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.”
    - (iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: “Each group 1 furnace without add-on air pollution control devices subject to emission limits in 40 CFR 63.1505(i)(2) processed only clean charge during this reporting period.”
  - 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.
- As required by 40 CFR 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR, in accordance with 40 CFR 63.1517(a).
  - The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most

recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

- The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- In addition to the general records required by 40 CFR 63.10(b), for a new or existing affected source (including an emission unit in a secondary aluminum processing unit) the permittee shall maintain records of the following, in accordance with 40 CFR 63.1517(b):
  - For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:
    - (i) 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.
    - (ii) 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.
    - (iii) 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, 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.
  - For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
  - For each continuous monitoring system, records required by 40 CFR 63.10(c).
  - 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.
  - Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.
  - Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
  - Records of annual inspections of emission capture/collection and closed vent systems.
  - Records for any approved alternative monitoring or test procedure.
  - Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

- (i) Startup, shutdown, and malfunction plan;
  - (ii) OM&M plan; and
  - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).
- For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

[12/06/2019]

## **3 Fugitive Emission Sources**

### **3.1 Process Description**

Fugitive sources at the facility include the following:

- Scrap receiving and hauling to storage
- Dross receiving and hauling to storage
- Rotary furnace charge staging and handling operations
- Salt cake staging and handling operations

[05/06/2015]

### **Operating Requirements**

#### **3.2 Reasonable Control of Fugitive Dust Emissions**

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

[05/06/2015]

### **Monitoring and Recordkeeping Requirements**

#### **3.3 Fugitive Dust Monitoring**

The permittee shall monitor and maintain records of the frequency and method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive dust emissions. The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

#### **3.4 Reasonable Control Measures**

The permittee shall conduct a quarterly, by calendar year, facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to

ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Records of this information shall remain on site for the most recent five year period and shall be made available to DEQ representatives upon request.

- 3.5** The permittee shall comply with the requirements of the recordkeeping General Provisions.

[12/31/2009]

## 4 General Provisions

### General Compliance

4.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the “Rules for the Control of Air Pollution in Idaho.” The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the “Rules for the Control of Air Pollution in Idaho,” and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).

[Idaho Code §39-101, et seq.]

4.2 The permittee shall at all times (except as provided in the “Rules for the Control of Air Pollution in Idaho”) maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

4.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

### Inspection and Entry

4.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee’s premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

### Construction and Operation Notification

4.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

4.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

## Performance Testing

- 4.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 4.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 4.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

## Monitoring and Recordkeeping

- 4.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

## Excess Emissions

- 4.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

## **Certification**

- 4.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

## **False Statements**

- 4.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

## **Tampering**

- 4.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

## **Transferability**

- 4.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

## **Severability**

- 4.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]