



west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: 304/926-0475 • Fax: 304/926-0479

Earl Ray Tomblin
Governor

**CLASS II ADMINISTRATIVE UPDATE TO A PERMIT
FOR A SECONDARY ALUMINUM PROCESSING FACILITY**

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (W. Va. Code §§22-5-1 et seq.), AND REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT, SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, THE SOURCE DESCRIBED BELOW.

This permit will supersede and replace Permit R13-2259B approved on August 24, 2006.

Name of Permittee: Aleris Recycling, Inc.
Name of Facility: Friendly Operation
Permit No.: R13-2259C
Plant ID No.: 095-00017
Effective Date of Permit: February 4, 2015
Permit Writer: Steven R. Pursley, PE
Facility Mailing Address: 283 Industrial Park Road
Friendly, WV 26146
County: Tyler
Nearest City or Town: Bens Run
UTM Coordinates: Easting: 491.613 km Northing: 4,369.314 km Zone: 17
Directions to Exact Location: From Charleston, WV, take I-77 North, take Exit 179 and then turn right onto State Route 2 North, turn from State Route 2 onto County Route 2/10. Continue to the end of County Route 2/10 and the facility will be located in the Tyler County Industrial Park.
Type of Facility or Modification: Class II administrative update to replace a baghouse, add a baghouse, remove and rename some equipment and increase the permitted heat input of the furnace to it's MDHI.

THIS PERMIT DOES NOT AFFECT 45CSR30 APPLICABILITY. THE SOURCE REMAINS A DEFERRED NONMAJOR SOURCE SUBJECT TO 45CSR30.

IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS, THIS PERMIT IS LIMITED AS FOLLOWS:

A. SPECIFIC REQUIREMENTS

1. Emissions of particulate matter from emission points 2E (baghouses BH-1 and BH-2) and 3E (BH-3 and BH-4) combined shall not exceed 0.06 pounds per hour nor 542 pounds per year.
2. Emissions of particulate matter from emission point 6E (Process Baghouse) shall not exceed 0.01 pounds per hour nor 0.04 tons per year.
3. Emissions from rotary furnace RF-1 shall not exceed the following:

Pollutant	Maximum Emission Rate	
	lb/hour	TPY
Particulate Matter (PM)	0.23	1.01
Oxides of Nitrogen (NO _x)	1.20	5.26
Sulfur Dioxide (SO ₂)	0.10	0.03
Volatile Organic Compounds (VOCs)	0.10	0.29
Carbon Monoxide (CO)	1.01	4.42
Hydrochloric Acid (HCl)	0.05	0.21

4. The maximum quantity of material charged to rotary furnace RF-1 shall not exceed 355,200 pounds per day.
5. The quantity of natural gas used as fuel by furnace RF-1 shall not 5,580,000 standard cubic feet per month.
6. Fume collection hoods shall be placed above rotary furnace RF-1 and vented to the Furnace Baghouse.
7. The permittee shall install and operate dust pick-up points on the following equipment which are exhausted directly to the material sizing and classifying baghouse system except that some of the equipment may be first exhausted directly to a product recovery separator:
 - i. Mega slam impactor (CR-02)
 - ii. Grizzly feeder (G-01)
 - iii. Triple deck screen (S-01)
 - iv. Two surge bins (B-01 & B-02)
 - v. G48 cage mill (CR-03)
 - vi. Five deck screen (S-02)

- vii. Tumbler (CR-01)
 - viii. Auxiliary feeder (F-02)
8. The quantity of material charged to the first vibratory feeder (F-01) in the material sizing and classifying system shall not exceed the amounts listed below:
- Hourly Limit: 25 tons per hour
 - Annual Limit: 219,000 tons per year
9. The quantity of material charged to the second vibratory feeder (F-02) supplying BC-3 shall not exceed the amounts listed below:
- Hourly Limit: 20 tons per hour
 - Annual Limit: 175,200 tons per year
10. The quantity of -10 mesh and smaller waste material loaded into trucks shall not exceed the amounts listed below:
- Hourly Limit: 20 tons per hour
 - Annual Limit: 175,200 tons per year
11. The quantity of saltcake loaded into trucks shall not exceed the amounts listed below:
- Hourly Limit: 100 tons per hour
 - Annual Limit: 78,840 tons per year
12. The permittee shall install and operate dust collection systems at the -10 mesh material loading station and the saltcake loading station. These systems shall be used to transport dust generated from loading operations to baghouses BH-3 & BH-1, respectively. These systems shall be in operation at all times when loading of -10 mesh material and/or saltcake is taking place.
13. The minimum collection efficiency of baghouse BH-1 shall be at least 99.5% for particles that are 0.5 microns or larger.
14. The minimum collection efficiency of baghouses BH-3 and BH-4 shall be at least 99.5% .
15. The minimum collection efficiency of the Process Baghouse shall be at least 99.9% for PM and PM₁₀.
16. Material receiving bays shall be constructed so as to have two sides and a roof. The front and back of each bay shall be equipped with plastic slotted curtains to minimize the generation of dust during the unloading of raw materials.
17. The permittee shall maintain dust control of the paved roads and parking lots at the facility by using a street sweeping machine. This machine shall be used as often as necessary to minimize the generation of fugitive dust from vehicular traffic.
18. At all times during furnace operation the permittee shall utilize lime injection into the emission stream from rotary furnace RF-1 prior to the furnace BH in amounts sufficient to control any potential emissions of hydrochloric acid but in no case shall the amount of lime injected into the emission stream be less than 10 pounds per hour.

19. The concentration of hydrochloric acid vapor in the stack gas from emission points 9E and 10E shall not exceed 0.512 milligrams per dry standard cubic meter.

B. OTHER REQUIREMENTS

1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
2. The permittee shall comply with all applicable provisions of 45CSR7, 45CSR10, 45CSR13, 45CSR30, 40 CFR 63 Subpart RRR provided that the permittee shall comply with any more stringent requirements as may be set forth under Specific Requirements, Section (A) of this permit.
3. The pertinent sections of 45CSR7 applicable to this facility include, but are not limited to, the following:

§45-7-3.1

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

§45-7-3.2

The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

§45-7-3.7

No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 5.1 is required to have a full enclosure and be equipped with a particulate matter control device.

§45-7-4.1

No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.

§45-7-4.2

Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B found at the end of this rule.

§45-7-5.1

Permit R13-2259C
Aleris Recycling, Inc.
Friendly Operation

No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

§45-7-5.2

The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

§45-7-8.1

At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

§45-7-8.2.

The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

§45-7-10.1.

Provisions of this rule shall not apply to particulate matter emissions regulated by Title 45 Series 2, 3, and 5 or to mobile internal combustion engines and aircraft.

4. The pertinent sections of 45CSR10 applicable to this facility include, but are not limited to, the following:

§45-10-4.1.

No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.

5. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate

tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance.

§45-13-10.2

The Secretary may suspend or revoke a permit or general permit registration if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Director may suspend or revoke the permit or general permit registration.

§45-13-10.3

The Secretary may suspend or revoke a permit or general permit registration if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W.Va. Code § 22-5-5 to show cause why the permit or general permit registration should not be suspended, modified or revoked.

6. The pertinent sections of 40 CFR 63 Subpart RRR applicable to this facility include, but are not limited to, the following:

§40 CFR 63.1500(c)

The requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in §63.2:

- (4) Each new and existing secondary aluminum processing units containing one or more group 1 furnace emission units processing other than clean charge.

§40 CFR 63.1500(f)

An aluminum die casting facility, aluminum foundry, or aluminum extrusion facility shall be considered to be an area source if it does not emit, or have the potential to emit considering controls, 10 tons per year or more of any single listed HAP or 25 tons per year of any combination of listed HAP from all emission sources which are located in a contiguous area and under common control, without regard to whether or not such sources are regulated under this subpart or any other subpart. In the case of an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which is an area source and is subject to regulation under this subpart only because it operates a thermal chip dryer, no furnace operated by such a facility shall be deemed to be subject to the requirements of this subpart if it melts only clean charge, internal scrap, or customer returns.

§40 CFR 63.1501(a)

The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.

§40 CFR 63.1505(i)

The owner or operator of a group 1 furnace must use the limits in this paragraph to

determine the emissions standards for a SAPU.

§40 CFR 63.1505(i)(3)

15µg of D/F TEQ per Mg (2.1 x 10⁻⁴ gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge;.

§40 CFR 63.1505(k)

On and after the compliance date established by §63.1501, the owner or operator must comply with the emission limits calculated using the equations for PM and HCl in paragraphs (k)(1) and (k)(2) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator must comply with the emission limit calculated using the equation for D/F in paragraph (k)(3) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

§40 CFR 63.1505(k)(3)

The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{c_{D/F}} = \frac{\sum_{i=1}^n (L_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 3})$$

Where,

$L_{ti_{D/F}}$ = The D/F emission limit for individual emission unit i in paragraph (i)(3) of this section for a group 1 furnace; and

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

NOTE: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

§40 CFR 63.1506(b)

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

§40 CFR 63.1506(b)(1)

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).

§40 CFR 63.1506(b)(2)

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

§40 CFR 63.1506(d)

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

§40 CFR 63.1506(d)(1)

Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

§40 CFR 63.1506(d)(2)

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

§40 CFR 63.1506(d)(3)

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

§40 CFR 63.1506(d)(3)(i)

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(ii)

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

§40 CFR 63.1510(a)

On and after the compliance date established by §63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

§40 CFR 63.1510(c)

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

§40 CFR 63.1510(d)

The owner or operator must:

§40 CFR 63.1510(d)(1)

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

§40 CFR 63.1510(d)(2)

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 §63.1506(c) and record the results of each inspection.

§40 CFR 63.1510(e)

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

§40 CFR 63.1510(e)(1)

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

§40 CFR 63.1510(e)(2)

The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

§40 CFR 63.1510(s)

Site-specific requirements for secondary aluminum processing units.

§40 CFR 63.1510(s)(1)

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

§40 CFR 63.1510(s)(1)(i)

The identification of each emission unit in the secondary aluminum processing unit;

§40 CFR 63.1510(s)(1)(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;

§40 CFR 63.1510(s)(1)(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;

§40 CFR 63.1510(s)(1)(iv)

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

§40 CFR 63.1510(s)(1)(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 §63.1510(t).

§40 CFR 63.1510(t)

Except as provided in paragraph (u) of this section, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

§40 CFR 63.1510(t)(1)

Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information 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.

§40 CFR 63.1510(t)(2)

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

§40 CFR 63.1510(t)(3)

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

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

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

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);
- 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.

§40 CFR 63.1510(t)(5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

§40 CFR 63.1510(u)

As an alternative to the procedures of paragraph (t) of this section, an owner or operator 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 63.1511(a)

Prior to conducting a performance test required by this subpart, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in §63.7(c).

§40 CFR 63.1511(b)

Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart. Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

§40 CFR 63.1511(b)(1)

The owner or operator 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.

§40 CFR 63.1511(b)(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)(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

§40 CFR 63.1511(b)(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)(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(c)

The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:

§40 CFR 63.1511(c)(7)

Method 23 for the concentration of D/F.

§40 CFR 63.1511(g)

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

§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)(2)

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

§40 CFR 63.1511(g)(3)

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

§40 CFR 63.1511(g)(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 63.1512(d)(1)

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

§40 CFR 63.1512(j)

The owner or operator must conduct performance tests as described in paragraphs (j)(1) through (3) of this section. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and $\mu\text{g TEQ/Mg}$ of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t). A performance test is required for:

§40 CFR 63.1512(j)(2)

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

§40 CFR 63.1512(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.

§40 CFR 63.1512(o)

The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

§40 CFR 63.1512(o)(1)

Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and

record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

§40 CFR 63.1512(o)(2)

Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

§40 CFR 63.1512(o)(3)

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:

$$W_t = F_1 W_1 + F_2 W_2 \quad (\text{Eq. 5})$$

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

W_2 = Weight of solid reactive flux;

§40 CFR 63.1512(o)(4)

Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

§40 CFR 63.1512(o)(5)

If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

§40 CFR 63.1512(p)

The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.

§40 CFR 63.1512.p(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(2)

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.

§40 CFR 63.1515(a)

The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

§40 CFR 63.1515(a)(1)

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

§40 CFR 63.1516(a)

The owner or operator must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §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 §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:

§40 CFR 63.1516(a)(1)

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

§40 CFR 63.1516(a)(2)

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.

7. All notifications and reports required pursuant to 40 CFR 63 shall be forwarded to:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

and Office of Air Enforcement and Compliance
Assistance (3AP20)
US Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

8. The permittee shall monitor and maintain a certified monthly record onsite of the hours of operation and the amount of natural gas burned in rotary furnace RF-1. These records

Permit R13-2259C
Aleris Recycling, Inc.
Friendly Operation

shall be properly maintained on site for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.

9. The permittee shall monitor and maintain a certified record onsite of the amount and type of material charged to rotary furnace RF-1. These records shall be properly maintained on site for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.
10. The permittee shall monitor and maintain a certified record onsite of the amount of material charged to the first vibratory feeder (F-1), the auxiliary vibratory feeder (F-2). These records shall be properly maintained on site for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.
11. The permittee shall monitor and maintain a certified record onsite of the amount of -40 mesh material loaded into trucks, and the amount of saltcake loaded into trucks. These records shall be properly maintained on site for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.
12. The permittee shall monitor and maintain a certified hourly record onsite of the lime injection rate to the emission stream from rotary furnace RF-1. These records shall be properly maintained on site for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.
13. The permittee shall maintain all baghouses in accordance with manufacturer specifications and ensure that the minimum collection efficiencies are met. The permittee shall maintain a certified record onsite of all maintenance done on all baghouses including bag replacements or repairs. These records shall be properly maintained onsite for a period not less than five (5) years and be made available to the Director, or his or her designated representative, upon request.

C. GENERAL REQUIREMENTS

1. In accordance with 45CSR30 - "Operating Permit Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first filing a Certified Emissions Statement (CES) and paying the appropriate fee. Such Certified Emissions Statement (CES) shall be filed and the appropriate fee paid annually. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Director or his/her duly authorized representative.

2. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.
3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Applications R13-2259, R13-2259A, R13-2259B and R13-2259C and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
4. At such reasonable time(s) as the Director may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in the permit application and/or applicable regulations. Test(s) shall be conducted in such a manner as the Director may specify or approve and shall be filed in a manner acceptable to the Director. The Director, or his/her duly authorized representative, may at his option witness or conduct such test. Should the Director exercise his option to conduct such test(s), the permittee shall provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Director. The Director shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.
5. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, either in whole or in part, authorized by this permit, the permittee shall notify the Director, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.
6. The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.
7. The permittee shall notify the Director, in writing, within fifteen (15) calendar days of the commencement of the construction, modification, or relocation activities authorized under this permit.
8. The permittee shall notify the Director, in writing, at least fifteen (15) calendar days prior to actual startup of the operations authorized under this permit.
9. This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.

10. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7.
11. At such time(s) as the Director may designate, the permittee herein shall prepare and submit an emission inventory for the previous calendar year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Director may, based upon the type and quantity of the pollutants emitted, establish a submittal frequency other than on an annual basis.

ISSUED BY:



William F. Durham, DIRECTOR
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

DATE SIGNED: February 6, 2015