



INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Intermediate Operating Permit Number: OP2014-006
Expiration Date: APR 28 2019
Installation ID: 113-0046
Project Number: 2012-03-036

Installation Name and Address

Missouri Smelting Technology, Inc.
50 Cherry Blossom Way
Troy, MO 63379
Lincoln County

Parent Company's Name and Address

MOST, Inc.
50 Cherry Blossom Way
Troy, MO 63379

Installation Description:

Missouri Smelting Technology, Inc. operates a secondary aluminum production facility in Troy, Missouri. The installation receives aluminum scrap from machining operations. The scrap is cleaned, dried, and crushed prior to melting. The melted aluminum is poured into molds to form the final products: ingots or portable holding crucibles. The installation is a synthetic minor source of Greenhouse Gases (GHG). The installation is located in Lincoln County, an attainment area for all criteria pollutants.

APR 29 2014

Effective Date


Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Missouri Smelting Technology, Inc. operates a secondary aluminum production facility in Troy, Missouri. The installation receives aluminum scrap from machining operations. The scrap is cleaned, dried, and crushed prior to melting. The melted aluminum is poured into molds to form the final products: ingots or portable holding crucibles. The installation is a synthetic minor source of GHG. The installation is located in Lincoln County, an attainment area for all criteria pollutants.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2011	2010	2009	2008	2007
Particulate Matter \leq Ten Microns (PM ₁₀)	5.43	5.43	4.66	2.22	4.12
Particulate Matter \leq 2.5 Microns (PM _{2.5})	4.65	4.65	3.93	5.12	4.83
Sulfur Oxides (SO _x)	0.03	0.03	0.61	0.22	0.03
Nitrogen Oxides (NO _x)	8.92	8.92	2.50	2.62	28.67
Volatile Organic Compounds(VOC)	0.47	0.47	0.70	1.34	5.88
Carbon Monoxide (CO)	0.37	0.37	0.93	1.46	0.93
Ammonia (NH ₃)		-	0.09	-	-
Hazardous Air Pollutants (HAP)	1.07	1.07	0.00003	0.00002	0.14
Hydrogen Chloride (7647-01-0)	1.07	1.07	0.00003	0.00002	-

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and identified as having unit-specific emission limitations.

Emission Unit	Description
EP-1	Thermal Chip Dryer – Process
EP-2	Scrap Crusher
EP-3.1	Five Melt Furnaces – Process
EP-3.2	Flux
EP-3.3	Pouring/Casting
EP-3.4	Dross Cooling
EP-4	Natural Gas Combustion

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

PERMIT CONDITION PW001

10 CSR 10-6.020(2)(I)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s)

Emission Limitation:

The permittee shall limit their natural gas combustion to 1,654 MMscf per consecutive 12-month period.

Monitoring/Recordkeeping:

1. The permittee shall record the amount of natural gas combusted each month and shall calculate the 12-month rolling total amount of natural gas combusted using Attachment D.
2. All records shall be kept for no less than five years and be made available immediately to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate either of the emission limitations have been exceeded.
2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and CSR for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

PERMIT CONDITION 001	
10 CSR 10-6.060 Construction Permits Required Construction Permit 102000-037A, Issued June 4, 2013 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
EP-3.1	Furnace #5

Emission Limitations:

1. Special Condition 2: The permittee shall emit less than 2.2 lb/hr of Hydrogen Chloride (HCl) and Chlorine (Cl) individually or 5.6 lb/hr of HCl and Cl combined from Furnace #5.
2. The permittee shall not cause or permit to be discharged into the atmosphere from this emission unit any visible emissions with an opacity greater than 20 percent.
 - a) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

Operational Limitation:

1. Special Condition 3.A: The permittee shall control HCl and particulate emissions from EP-3.1 Five Melt Furnaces using a limestone injection baghouse.
2. Special Condition 3.B: The baghouse shall be operated and maintained in accordance with the manufacturer's specifications at all times during which EP-3.1 Five Melt Furnaces is in operation. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
3. Special Condition 3.C: Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
4. Special Condition 3.D: The permittee shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

Recordkeeping/Reporting:

1. The permittee shall retain the June 18 – 19, 2013 (or more recent) stack testing results documenting compliance with the HCl and Cl emission limitations.
2. Special Condition 3.E: The permittee shall maintain a copy of the baghouse manufacturer's performance warranty on site indicating the design conditions for the operating pressure drop of the baghouse.
3. Special Condition 3.F: The permittee shall maintain an operating and maintenance log for the baghouse which shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and

- b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 4. Special Condition 4: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
- 5. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002	
10 CSR 10-6.060 Construction Permits Required	
Construction Permit 0797-003B, Issued April 29, 2013	
Emission Unit	Description
EP-1	Thermal Chip Dryer
EP-3.3	Pouring/Casting
EP-4	Natural Gas Combustion

Emission Limitation:

- 1. Special Condition 2.A: The permittee shall emit less than 65.04 tons of NO_x in any consecutive 12-month period from EP-1 Thermal Chip Dryer, EP-3.3 Pouring/Casting, and EP-4 Natural Gas Combustion.
- 2. Special Condition 5.A: The permittee shall emit less than 3.36 lb/hr of VOC from EP-1 Thermal Chip Dryer.

Operational Limitations:

- 1. Special Condition 4.A: The permittee shall control emissions from EP-1 Thermal Chip Dryer using an afterburner.
- 2. Special Condition 4.B: The afterburner shall be operated and maintained in accordance with the manufacturer's specifications at all time during which EP-1 Thermal Chip Dryer is in operation.

Monitoring/Recordkeeping:

- 1. Special Condition 2.B: Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.
- 2. The permittee shall retain the November 30, 2011 (or more recent) stack testing results documenting compliance with the VOC emission limitation.
- 3. Special Condition 4.C: The permittee shall maintain a copy of the afterburner manufacturer's performance warranty on site.
- 4. Special Condition 4.D: The permittee shall maintain an operating and maintenance log for the afterburner which shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 5. Special Condition 6.A: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.

Reporting:

- 1. Special Condition 6.B: The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end

of the month during which any record required by this permit shows an exceedance of an emission limitation imposed by this permit.

2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003	
10 CSR 10-6.060 Construction Permits Required Construction Permit 0797-003B, Issued April 29, 2013 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
EP-2	Scrap Crusher
EP-3.1	Furnaces #1, #2, #3, and #4
EP-3.2	Flux

Emission Limitations:

1. Special Condition 5.B: The permittee shall emit less than 0.69 lb/hr HAP from EP-3.1 Furnaces #1, #2, #3, and #4.
2. The permittee shall not cause or permit to be discharged into the atmosphere from these emission units any visible emissions with an opacity greater than 20 percent.
 - a) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

Operational Limitations:

1. Special Condition 3.A: The permittee shall control HCl and particulate emissions from EP-2 Scrap Crusher; EP-3.1 Furnaces #1, #2, #3, and #4; and EP-3.2 Flux using limestone injection baghouses.
2. Special Condition 3.B: The baghouses shall be operated and maintained in accordance with the manufacturer's specifications at all times EP-2 Scrap Crusher, EP-3.1 Furnaces #1, #2, #3, and #4, and EP-3.2 Flux are in operation. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
3. Special Condition 3.C: Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

1. The permittee shall retain the June 18 – 19, 2013 (or more recent) stack testing results documenting compliance with the HAP emission limitation.
2. Special Condition 3.D: The permittee shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
3. Special Condition 3.E: The permittee shall maintain a copy of the baghouse manufacturer's performance warranty on site indicating the design conditions for the operating pressure drop of the baghouses.
4. Special Condition 3.F: The permittee shall maintain an operating and maintenance log for the baghouses which shall include the following:

- a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
5. Special Condition 6.A: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.

Reporting:

- 1. Special Condition 6.B: The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit shows an exceedance of an emission limitation imposed by this permit.
- 2. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 004	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
EP-3.4	Dross Cooling

Emission Limitations:

- 1. The permittee shall not cause or permit to be discharged into the atmosphere from this emission unit any visible emissions with an opacity greater than 20 percent.
- 2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

Operational Limitations:

- 1. The permittee shall control particulate emissions from EP-3.4 Dross Cooling using a fabric filter dust collection system which is connected to the dross pressing operation. The vast majority of dross from the furnaces is run through the dross press which is located outside of the dross room. Pressed dross is then transferred to the dross room for final cooling and shipment off-site.
- 2. The fabric filter shall be operated and maintained in accordance with the manufacturer's specifications at all times EP-3.4 Dross Cooling is in operation. The fabric filter shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. This gauge or meter shall be located such that Department of Natural Resources' employees may easily observe them.
- 3. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

- 1. The permittee shall monitor and record the operating pressure drop across the fabric filters at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- 2. The permittee shall maintain a copy of the fabric filter manufacturer's performance warranty on site indicating the design conditions for the operating pressure drop across the baghouse.

3. The permittee shall maintain an operating and maintenance log for the fabric filter which shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 005	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	
40 CFR Part 63, Subpart RRR – National Emission Standards for HAP for Secondary Aluminum Production	
Emission Unit	Description
EP-1	Thermal Chip Dryer
EP-3.1	Five Melt Furnaces

Emission Standards:

1. *Summary.* The permittee shall comply with each applicable limit in §63.1505. Table 1 to 40 CFR Part 63, Subpart RRR summarizes the emission standards for each type of source. [§63.1505(a)]
2. *Thermal chip dryer.* The permittee shall not discharge or cause to be discharged to the atmosphere emissions in excess of: [§63.1505(c)]
 - a) 2.50 µg of D/F (dioxins and furans) TEQ per Mg (3.5×10^{-5} gr/ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is an area source. [§63.1505(c)(2)]
3. *Group 1 furnace.* The permittee shall use the limits in §63.1505(i) to determine the emission standards for a SAPU. [§63.1505(i)]
 - a) 15 µg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is an area source. This limit does not apply if the furnace processes only clean charge; and [§63.1505(i)(3)]
 - b) The permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge. [§63.1505(i)(6)]
 - c) Sidewell group 1 furnaces that conduct reactive fluxing (except for cover flux) in the hearth, or that conduct reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, shall comply with the emission limits of §63.1505(i)(3) on the basis of the combined emissions from the sidewell and the hearth. [§63.1505(i)(7)]
4. *Secondary aluminum processing unit (SAPU).* The permittee shall comply with the emission limit calculated using the equation for D/F in §63.1505(k)(3) for each SAPU at a secondary aluminum production facility that is an area source. [§63.1505(k)]
 - a) The permittee shall not discharge or allow to be discharged to the atmosphere any three-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{cD/F} = \frac{\sum_{i=1}^n (L_{tiD/F} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \text{ (Equation 3)}$$

Where,

$L_{tiD/F}$ = The D/F emission limit for individual emission unit i in §63.1505(i)(3) for a group 1 furnace; and

$L_{cD/F}$ = The D/F emission limit for the SAPU.

NOTE: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit. [§63.1505(k)(3)]

- b) Each SAPU at a secondary aluminum production facility that is an area source may demonstrate compliance with the emission limits of §63.1505(k)(3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of §63.1505(i)(3). [§63.1505(k)(5)]
- c) With the prior approval of the Air Pollution Control Program, the permittee may redesignate any existing group 1 furnace at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of 40 CFR Part 63, Subpart RRR and will be irreversible. [§63.1505(k)(6)]

Table 1 to 40 CFR Part 63, Subpart RRR – Emission Standards for New and Existing Affected Sources

Affected Source/Emission Unit	Pollutant	Limit	Units
New and existing thermal chip dryer	D/F ^a	2.5	µg TEQ/Mg of feed
New and existing group 1 furnace	D/F ^a	15.0	µg TEQ/Mg of feed
New and existing SAPU (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or all simultaneously constructed new group 1 furnaces and new in-line fluxers)	D/F ^b	Equation 3	

^aD/F limit applies to unit at an area source.

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

Operating Requirements:

1. *Summary.* [§63.1506(a)]
 - a) The permittee shall operate all new and existing affected sources and control equipment according to the requirements in §63.1506. [§63.1506(a)(1)]
 - b) Operating requirements are summarized in Table 2 to 40 CFR Part 63, Subpart RRR. [§63.1506(a)(4)]
2. *Labeling.* The permittee shall provide and maintain easily visible labels posted at each group 1 furnace and in-line fluxer that identifies the applicable emission limits and means of compliance, including: [§63.1506(b)]
 - a) The type of affected source or emission unit (*e.g.*, group 1 furnace, in-line fluxer). [§63.1506(b)(1)]
 - b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, 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. [§63.1506(b)(2)]
3. *Capture/collection systems.* For each affected source or emission unit equipped with an add-on air pollution control device, the permittee shall: [§63.1506(c)]
 - a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters three and five of “Industrial Ventilation: A Manual of Recommended Practice” (incorporated by reference in §63.1502); [§63.1506(c)(1)]

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- b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and [§63.1506(c)(2)]
 - c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan. [§63.1506(c)(3)]
4. *Feed/charge weight.* For each affected source or emission unit subject to an emission limit in $\mu\text{g}/\text{Mg}$ (gr/ton) of feed/charge the permittee shall: [§63.1506(d)]
- a) Except as provided in §63.1506(d)(3), install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and [§63.1506(d)(1)]
 - b) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan. [§63.1506(d)(2)]
 - c) The permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that: [§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 [§63.1506(d)(3)(i)]
 - ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight. [§63.1506(d)(3)(ii)]
5. *Thermal chip dryer.* For each thermal chip dryer with emissions controlled by an afterburner the permittee shall: [§63.1506(f)]
- a) Maintain the three-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test. [§63.1506(f)(1)]
 - b) Operate each afterburner in accordance with the OM&M plan. [§63.1506(f)(2)]
 - c) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock. [§63.1506(f)(3)]
6. *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: [§63.1506(m)]
- a) If a bag leak detection system (BLDS) is used to meet the monitoring requirements in §63.1510, the permittee shall: [§63.1506(m)(1)]
 - i) Initiate corrective action within one hour of a BLDS alarm. [§63.1506(m)(1)(i)]
 - ii) Complete the corrective action procedures in accordance with the OM&M plan. [§63.1506(m)(1)(ii)]
 - iii) Operate each fabric filter system such that the BLDS alarm does not sound more than five percent of the operating time during a six-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 one hour. If the permittee takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the permittee to initiate corrective action. [§63.1506(m)(1)(iii)]
 - b) If a continuous opacity monitoring system (COMS) is used to meet the monitoring requirements in § 63.1510, the permittee shall: [§63.1506(m)(2)]
 - i) Initiate corrective action within one hour of any six-minute average reading of five percent or more opacity; and [§63.1506(m)(2)(i)]
 - ii) Complete the corrective action procedures in accordance with the OM&M plan. [§63.1506(m)(2)(ii)]

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- c) Maintain the three-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F).
[§63.1506(m)(3)]
 - d) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test. [§63.1506(m)(4)]
 - e) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
[§63.1506(m)(5)]
 - f) Operate each sidewell furnace such that: [§63.1506(m)(6)]
 - i) The level of molten metal remains above the top of the passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.
[§63.1506(m)(6)(i)]
 - ii) Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.
[§63.1506(m)(6)(ii)]
7. *Corrective action.* When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee shall initiate corrective action. Corrective action shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation. [§63.1506(p)]

Table 2 to 40 CFR Part 63, Subpart RRR - Summary of Operating Requirements for New and Existing Affected Sources and Emission Units

Affected Source/ Emission Unit	Monitor Type/Operation/Process	Operating Requirements
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan. ^b
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits ^a	Charge/feed weight or Production weight	Operate a device that records the weight of each charge; Operate in accordance with OM&M plan. ^b
Group 1 furnaces	Labeling	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Thermal chip dryer with afterburner	Afterburner operating temperature	Maintain average temperature for each three-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan. ^b
	Feed material	Operate using only unpainted aluminum chips.
Group 1 furnace with lime-injected fabric filter (including those that are part of a SAPU).	Bag leak detector or	Initiate corrective action within one-hr of alarm; operate such that alarm does not sound more than five percent of operating time in six-month period; complete corrective action in accordance with the OM&M plan. ^b
	COMS	Initiate corrective action within one-hr of a six-minute average opacity reading of five percent or more; complete corrective action in accordance with the OM&M plan. ^b
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each three-hour period at or below average temperature during the performance test +14°C (+25°F).
	Reactive flux injection rate	Maintain reactive flux injection rate (kg/Mg) (lb/ton) at or below rate used during the performance test for each furnace cycle.
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate sidewell furnaces such that the level of molten metal is above the top of the passage between sidewell and hearth during reactive flux injection, unless the hearth is also controlled.
	Fluxing in sidewell furnace hearth	Add reactive flux only to the sidewell of the furnace unless the hearth is also controlled.

^aThermal chip dryers and group 1 furnaces including melting/holding furnaces.

^bOM&M plan—Operation, maintenance, and monitoring plan.

Monitoring:

1. *Summary.* The permittee shall monitor all control equipment and processes according to the requirements in §63.1510. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to 40 CFR Part 63, Subpart RRR. [§63.1510(a)]
2. *Operation, maintenance, and monitoring (OM&M) plan.* The permittee shall prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The plan shall be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of §63.1510 is otherwise consistent with the requirements of 40 CFR Part 63, Subpart RRR. 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 §63.1510 or 40 CFR Part 63, Subpart RRR, 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 shall contain the following information: [§63.1510(b)]
 - a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device. [§63.1510(b)(1)]
 - b) A monitoring schedule for each affected source and emission unit. [§63.1510(b)(2)]
 - c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505. [§63.1510(b)(3)]
 - d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: [§63.1510(b)(4)]
 - i) Calibration and certification of accuracy of each monitoring device, at least once every six months, according to the manufacturer's instructions; and [§63.1510(b)(4)(i)]
 - ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by 40 CFR Part 63, Subpart A. [§63.1510(b)(4)(ii)]
 - e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used. [§63.1510(b)(5)]
 - f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in §63.1510(b)(1), including: [§63.1510(b)(6)]
 - i) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and [§63.1510(b)(6)(i)]
 - ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed. [§63.1510(b)(6)(ii)]
 - g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance. [§63.1510(b)(7)]
3. *Labeling.* The permittee shall inspect the labels for each group 1 furnace and in-line fluxer 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. [§63.1510(c)]
4. *Capture/collection system.* The permittee shall: [§63.1510(d)]

- a) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and [§63.1510(d)(1)]
- b) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection. [§63.1510(d)(2)]
5. *Feed/charge weight.* The permittee 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 shall be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the permittee may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [§63.1510(e)]
 - a) The accuracy of the weight measurement device or procedure must be \pm one 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. [§63.1510(e)(1)]
 - b) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six months. [§63.1510(e)(2)]
6. *Fabric filters and lime-injected fabric filters.* The permittee shall install, calibrate, maintain, and continuously operate a BLDS as required in §63.1510(f)(1) or a COMS as required in §63.1510(f)(2). [§63.1510(f)]
 - a) These requirements apply to new or existing affected sources or existing emission units using a BLDS. [§63.1510(f)(1)]
 - i) The permittee shall install and operate a BLDS for each exhaust stack of a fabric filter. [§63.1510(f)(1)(i)]
 - ii) Each triboelectric BLDS shall be installed, calibrated, operated, and maintained according to the “Fabric Filter Bag Leak Detection Guidance,” (September 1997). This document is available from EPA; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other BLDS shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations. [§63.1510(f)(1)(ii)]
 - iii) The BLDS shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 mg/acm (0.0044 gr/acf) or less. [§63.1510(f)(1)(iii)]
 - iv) The BLDS sensor shall provide output of relative or absolute PM loadings. [§63.1510(f)(1)(iv)]
 - v) The BLDS shall be equipped with a device to continuously record the output signal from the sensor. [§63.1510(f)(1)(v)]
 - vi) The BLDS shall 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 shall be located where it is easily heard by plant operating personnel. [§63.1510(f)(1)(vi)]

- vii) For positive pressure fabric filter systems, a BLDS shall be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter. [§63.1510(f)(1)(vii)]
- viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. [§63.1510(f)(1)(viii)]
- ix) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time. [§63.1510(f)(1)(ix)]
- x) Following initial adjustment of the system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition. [§63.1510(f)(1)(x)]
- b) These requirements apply to new or existing affected sources or existing emission units using a COMS. [§63.1510(f)(2)]
 - i) The permittee shall install, calibrate, maintain, and operate a COMS to measure and record the opacity of emissions exiting each exhaust stack. [§63.1510(f)(2)(i)]
 - ii) Each COMS shall meet the design and installation requirements of Performance Specification 1 in Appendix B to 40 CFR Part 60. [§63.1510(f)(2)(ii)]
- 7. *Afterburner.* These requirements apply to affected sources using an afterburner to comply with the requirements of 40 CFR Part 63, Subpart RRR. [§63.1510(g)]
 - a) The permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A. [§63.1510(g)(1)]
 - b) The temperature monitoring device must meet each of these performance and equipment specifications: [§63.1510(g)(2)]
 - i) The temperature monitoring device shall be installed at the exit of the combustion zone of each afterburner. [§63.1510(g)(2)(i)]
 - ii) The monitoring system shall record the temperature in 15-minute block averages and determine and record the average temperature for each three-hour block period. [§63.1510(g)(2)(ii)]
 - iii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1512(m). [§63.1510(g)(2)(iii)]
 - iv) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator. [§63.1510(g)(2)(iv)]
 - c) The permittee shall conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection shall include: [§63.1510(g)(3)]
 - i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor; [§63.1510(g)(3)(i)]
 - ii) Inspection for proper adjustment of combustion air; [§63.1510(g)(3)(ii)]
 - iii) Inspection of internal structures (*e.g.*, baffles) to ensure structural integrity; [§63.1510(g)(3)(iii)]
 - iv) Inspection of dampers, fans, and blowers for proper operation; [§63.1510(g)(3)(iv)]
 - v) Inspection for proper sealing; [§63.1510(g)(3)(v)]
 - vi) Inspection of motors for proper operation; [§63.1510(g)(3)(vi)]

- vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary; [§63.1510(g)(3)(vii)]
 - viii) Inspection of afterburner shell for corrosion and/or hot spots; [§63.1510(g)(3)(viii)]
 - ix) Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and [§63.1510(g)(3)(ix)]
 - x) Verification that the equipment is maintained in good operating condition. [§63.1510(g)(3)(x)]
 - xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan. [§63.1510(g)(3)(xi)]
8. *Fabric filter inlet temperature.* These requirements apply to group 1 furnaces using a lime-injected fabric filter to comply with the requirements of 40 CFR Part 63, Subpart RRR. [§63.1510(h)]
- a) 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 40 CFR Part 63, Subpart A. [§63.1510(h)(1)]
 - b) The temperature monitoring device shall meet each of these performance and equipment specifications: [§63.1510(h)(2)]
 - i) The monitoring system shall record the temperature in 15-minute block averages and calculate and record the average temperature for each three-hour block period. [§63.1510(h)(2)(i)]
 - ii) The recorder response range shall include zero and 1.5 times the average temperature established according to the requirements in §63.1512(n). [§63.1510(h)(2)(ii)]
 - iii) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator. [§63.1510(h)(2)(iii)]
9. *Lime injection.* These requirements apply to affected sources or emission units using a lime-injected fabric filter to comply with the requirements of 40 CFR Part 63, Subpart RRR. [§63.1510(i)]
- a) For a continuous lime injection system, the permittee shall verify that lime is always free-flowing by either: [§63.1510(i)(1)]
 - i) Inspecting each feed hopper or silo at least once each eight-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the eight-hour periods, the permittee shall increase the frequency of inspections to at least once every four-hour period for the next three days. The permittee may return to inspections at least once every eight hour period if corrective action results in no further blockages of lime during the three-day period; or [§63.1510(i)(1)(i)]
 - ii) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the permittee shall promptly initiate and complete corrective action, or [§63.1510(i)(1)(ii)]
 - b) For a continuous lime injection system, the permittee shall record the lime feeder setting once each day of operation. [§63.1510(i)(2)]
 - c) If the permittee intermittently adds lime to a lime coated fabric filter, the permittee shall obtain approval from the permitting authority for a lime addition monitoring procedure. The permitting authority 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. [§63.1510(i)(3)]
10. *Total reactive flux injection rate.* These requirements apply to group 1 furnaces and in-line fluxers. The permittee shall: [§63.1510(j)]

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- a) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit. [§63.1510(j)(1)]
 - i) The monitoring system shall 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. [§63.1510(j)(1)(i)]
 - ii) The accuracy of the weight measurement device shall be \pm one percent of the weight of the reactive component of the flux being measured. The permittee may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of \pm one percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards. [§63.1510(j)(1)(ii)]
 - 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 six months. [§63.1510(j)(1)(iii)]
 - b) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o). [§63.1510(j)(2)]
 - c) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of: [§63.1510(j)(3)]
 - i) Gaseous or liquid reactive flux other than chlorine; and [§63.1510(j)(3)(i)]
 - ii) Solid reactive flux. [§63.1510(j)(3)(ii)]
 - d) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o). [§63.1510(j)(4)]
 - e) For each group 1 furnace or in-line fluxer performing reactive fluxing, the permittee may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis. [§63.1510(j)(5)]
11. *Thermal chip dryer.* These requirements apply to thermal chip dryers with emissions controlled by an afterburner. The permittee shall: [§63.1510(k)]
- a) Record the type of materials charged to the unit for each operating cycle or time period used in the performance test. [§63.1510(k)(1)]
 - b) Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(f)(3) for each six-month reporting period. Each certification shall contain the information in §63.1516(b)(2)(i). [§63.1510(k)(2)]
12. *Sidewell group 1 furnace with add-on air pollution control devices.* These requirements apply to sidewell group 1 furnaces using add-on air pollution control devices. The permittee shall: [§63.1510(n)]
- a) Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device. [§63.1510(n)(1)]

- b) Submit a certification of compliance with the operational standards in §63.1506(m)(6) for each six-month reporting period. Each certification shall contain the information in §63.1516(b)(2)(iii). [§63.1510(n)(2)]
13. *Site-specific requirements for SAPU.* [§63.1510(s)]
- a) For each SAPU at the facility, the permittee shall include within the OM&M plan prepared in accordance with §63.1510(b), the following information: [§63.1510(s)(1)]
- i) The identification of each emission unit in the SAPU; [§63.1510(s)(1)(i)]
- ii) The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application; [§63.1510(s)(1)(ii)]
- iii) The emission limit calculated for each SAPU and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; [§63.1510(s)(1)(iii)]
- iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of 40 CFR Part 63, Subpart RRR; and [§63.1510(s)(1)(iv)]
- v) The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the three-day, 24-hour rolling average using the procedure in §63.1510(t). [§63.1510(s)(1)(v)]
- b) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: [§63.1510(s)(2)]
- i) Any averaging among emissions of differing pollutants; [§63.1510(s)(2)(i)]
- ii) The inclusion of any affected sources other than emission units in a SAPU; [§63.1510(s)(2)(ii)]
- iii) The inclusion of any emission unit while it is shutdown; or [§63.1510(s)(2)(iii)]
- iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations. [§63.1510(s)(2)(iv)]
- c) 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 §63.1510(s)(1) and obtain approval of the applicable permitting authority prior to implementing any revisions. [§63.1510(s)(3)]
14. *SAPU.* Except as provided in §63.1510(u), the permittee shall calculate and record the three-day, 24-hour rolling average emissions of D/F for each SAPU on a daily basis. To calculate the three-day, 24-hour rolling average, the permittee shall: [§63.1510(t)]
- a) Calculate and record the total weight of material charged to each emission unit in SAPU for each 24-hour day of operation using the feed/charge weight information required in §63.1510(e). If the permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations shall be conducted on the aluminum production weight basis. [§63.1510(t)(1)]
- b) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds. [§63.1510(t)(2)]
- c) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU. [§63.1510(t)(3)]
- d) Compute the 24-hour daily emission rate using Equation 4:

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

Where,

E_{day} = The daily 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. [§63.1510(t)(4)]

- e) Calculate and record the three-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the three most recent consecutive days and dividing by three. [§63.1510(t)(5)]
15. *SAPU compliance by individual emission unit demonstration.* As an alternative to the procedures of §63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the SAPU is in compliance with the applicable emission limits for the emission unit. [§63.1510(u)]
16. *Alternative monitoring method for lime addition.* For each lime-coated fabric filter that employs intermittent or noncontinuous lime addition, the permittee may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis. [§63.1510(v)]
17. *Alternative monitoring methods.* If the permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in 40 CFR Part 63, Subpart RRR, other than those alternative monitoring methods which may be authorized pursuant to §63.1510(j)(5) and §63.1510(v), the permittee may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in §63.1510(w)(1) through (6). [§63.1510(w)]

Table 3 to 40 CFR Part 63, Subpart RRR - Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

Affected source/ Emission unit	Monitor Type/Operation/Process	Monitoring Requirements
All affected sources and emission units with an add on air pollution control device	Emission capture and collection system	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.
All affected sources and emission units subject to production-based (lb/ton of feed/charge) emission limits ^a	Feed/charge weight	Record weight of each feed/charge, weight measurement device or other procedure accuracy of \pm one percent ^b ; calibrate according to manufacturer's specifications, or at least once every six months.
Group 1 furnaces	Labeling	Check monthly to confirm that labels are intact and legible.
Thermal chip dryer with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record average temperature for each 15-minute block; determine and record three-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Feed/charge material	Record identity of each feed/charge; certify feed/charge materials every six months.
Group 1 furnace with lime-injected fabric filter	Bag leak detector or	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" ^c ; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS-1; collect data in accordance with 40 CFR Part 63, Subpart A; determine and record six-minute block averages.
	Lime injection rate	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every eight hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every four hours for three days; return to eight-hour inspections if corrective action results in no further blockage during three-day period. ^d
	Reactive flux injection rate	Weight measurement device accuracy of \pm one percent ^b ; calibrate every three months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5).
	Fabric filter inlet temperature	Continuous measurement device to meet specifications in §63.1510(h)(2); record temperatures in 15-minute block averages; determine and record three-hour block averages.
	Maintain molten aluminum level in sidewall furnace	Maintain aluminum level operating log; certify every six months.

^aThermal chip dryers and group 1 furnaces or melting/holding furnaces.

^bPermitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.

^cNon-triboelectric bag leak detectors shall be installed and operated in accordance with manufacturers' specifications.

^dPermitting agency may approve other alternatives including load cells for lime hopper weight, or sensors for carrier gas pressure at fabric filter outlet.

Performance Testing/Compliance Demonstration General Requirements:

The permittee shall refer to §63.1511, §63.1512, and §63.1513 for performance testing/general compliance demonstration requirements under 40 CFR Part 63, Subpart RRR.

General Provisions:

The permittee shall refer to Appendix A to 40 CFR Part 63, Subpart RRR for 40 CFR Part 63, Subpart A applicability.

Notifications:

1. *Initial notifications.* The permittee shall submit initial notifications to the applicable permitting authority as follows: [§63.1515(a)]
 - a) As required by §63.9(e) and (f), the permittee shall provide notification of the anticipated date for conducting performance tests and visible emission observations. The permittee shall notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test shall be provided at least 30 days before the observations are scheduled to take place. [§63.1515(a)(6)]
 - b) As required by §63.9(g), the permittee shall provide additional notifications for sources with CEMS or COMS. [§63.1515(a)(7)]
2. *Notification of compliance status report.* The notification shall be signed by the responsible official who shall certify its accuracy. A complete notification of compliance status report shall include the information specified in §63.1515(b)(1) through (10). The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. The permittee shall provide duplicate notification to the applicable Regional Administrator. If the permittee submits the information specified in §63.1515 at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report shall include: [§63.1515(b)]
 - a) All information required in §63.9(h). The permittee shall provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests). [§63.1515(b)(1)]
 - b) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a CEMS or COMS). [§63.1515(b)(2)]
 - c) Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements. [§63.1515(b)(3)]
 - d) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.*, lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test. [§63.1515(b)(4)]
 - e) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c). [§63.1515(b)(5)]
 - f) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for BLDS in §63.1510(f). [§63.1515(b)(6)]
 - g) 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.

[§63.1515(b)(8)]

h) The OM&M plan. [§63.1515(b)(9)]

i) Startup, shutdown, and malfunction plan, with revisions. [§63.1515(b)(10)]

Recordkeeping:

1. As required by §63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63, Subparts A and RRR. [§63.1517(a)]
 - a) The permittee must retain each record for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site. [§63.1517(a)(1)]
 - b) The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and [§63.1517(a)(2)]
 - c) The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software. [§63.1517(a)(3)]
2. In addition to the general records required by §63.10(b), the permittee shall maintain records of: [§63.1517(b)]
 - a) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter: [§63.1517(b)(1)]
 - i) If a BLDS is used, the number of total operating hours for the affected source or emission unit during each six-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. [§63.1517(b)(1)(i)]
 - ii) If a COMS is used, records of opacity measurement data, including records where the average opacity of any six-minute period exceeds five 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. [§63.1517(b)(1)(ii)]
 - b) For each affected source with emissions controlled by an afterburner: [§63.1517(b)(2)]
 - i) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any three-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and [§63.1517(b)(2)(i)]
 - ii) Records of annual afterburner inspections. [§63.1517(b)(2)(ii)]
 - c) For each group 1 furnace, subject to D/F emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the three-hour block average temperature exceeds the compliant operating parameter value +14°C (+25°F), with a brief explanation of the cause of the excursion and the corrective action taken. [§63.1517(b)(3)]
 - d) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter: [§63.1517(b)(4)]
 - i) Records of inspections at least once every eight-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every four-hour period for the subsequent three days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where

- blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; [§63.1517(b)(4)(i)]
- ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. [§63.1517(b)(4)(ii)]
 - iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in §63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge). [§63.1517(b)(4)(iii)]
- e) For each group 1 furnace, 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. [§63.1517(b)(5)]
 - f) For each continuous monitoring system, records required by §63.10(c). [§63.1517(b)(6)]
 - g) 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. [§63.1517(b)(7)]
 - h) Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for D/F emissions. [§63.1517(b)(10)]
 - i) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [§63.1517(b)(13)]
 - j) Records of annual inspections of emission capture/collection and closed vent systems. [§63.1517(b)(14)]
 - k) Records for any approved alternative monitoring or test procedure. [§63.1517(b)(15)]
 - l) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - i) Startup, shutdown, and malfunction plan; [§63.1517(b)(16)(i)]
 - ii) OM&M plan. [§63.1517(b)(16)(ii)]
 - m) For each SAPU, records of total charge weight, or if permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of three-day, 24-hour rolling average emissions. [§63.1517(b)(17)]
3. Records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

1. *Startup, shutdown, and malfunction plan/reports.* The permittee shall develop 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 permittee 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 shall include: [§63.1516(a)]
- a) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and [§63.1516(a)(1)]
 - b) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions. [§63.1516(a)(2)]
2. *Excess emissions/summary report.* The permittee shall submit semi-annual reports according to the requirements in §63.10(e)(3). Except, the permittee shall submit the semi-annual reports within 60 days after the end of each six-month period instead of within 30 days after the calendar half as specified in §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. [§63.1516(b)]
- a) A report shall be submitted if any of these conditions occur during a six-month reporting period: [§63.1516(b)(1)]
 - i) The corrective action specified in the OM&M plan for a BLDS alarm was not initiated within one hour. [§63.1516(b)(1)(i)]
 - ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within one hour. [§63.1516(b)(1)(ii)]
 - iii) An excursion of a compliant process or operating parameter value or range (*e.g.*, lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter). [§63.1516(b)(1)(iv)]
 - iv) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3). [§63.1516(b)(1)(v)]
 - v) An affected source (including an emission unit in a SAPU) was not operated according to the requirements of 40 CFR Part 63, Subpart RRR. [§63.1516(b)(1)(vi)]
 - vi) A deviation from the three-day, 24-hour rolling average emission limit for a SAPU. [§63.1516(b)(1)(viii)]
 - b) Each report shall include each of these certifications, as applicable: [§63.1516(b)(2)]
 - i) For each thermal chip dryer: “Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.” [§63.1516(b)(2)(i)]
 - ii) 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 D/F emissions during this reporting period.” [§63.1516(b)(2)(iii)]
 - c) 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. [§63.1516(b)(3)]
3. *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR Part 70, the permittee shall certify continuing compliance based upon, but not limited to, the following conditions: [§63.1516(c)]
- a) Any period of excess emissions, as defined in §63.1516(b)(1), that occurred during the year were reported as required by 40 CFR Part 63, Subpart RRR; and [§63.1516(c)(1)]
 - b) All monitoring, recordkeeping, and reporting requirements were met during the year. [§63.1516(c)(2)]

4. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction, which could possibly cause an exceedance of this regulation.
5. The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 006	
10 CSR 10-6.400 Restriction of Emission of PM From Industrial Processes	
Emission Unit	Description
EP-3.4	Dross Cooling

Emission Limitation:

1. The permittee shall not emit PM in excess of 3.85 lb/hr from EP-3.4 Dross Cooling.
2. The permittee shall not cause, allow, or permit the emission of PM from any source in a concentration in excess of 0.30 gr/dscf of exhaust gases.

Monitoring/Recordkeeping:

1. The permittee shall retain the potential to emit calculations in Attachment C which demonstrate that the above emission limitation will never be exceeded. No further recordkeeping shall be required to demonstrate compliance with the emission limitation.
2. The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be kept for a period of five years.

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the CFR, CSR, and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

1. General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
2. Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premise having not more than four dwelling units, provided that the refuse originates on the same premises.
 - b) Yard waste.
3. Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the permittee fails to comply with the conditions or any provisions of the permit.
4. Missouri Smelting Technology, Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least 200 yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Missouri Smelting Technology, Inc. fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020(2)(N)5., the director shall not issue an open burning permit unless the permittee can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
5. Reporting and Recordkeeping. 40 CFR Part 60, Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in §60.2245 - §60.2260. The provisions of 40 CFR Part 60, Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with §60.2245 - §60.2260, sources shall conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
6. Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A – Test Methods, Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1. In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3. Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under §643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under §643.080 or §643.151, RSMo.
4. Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under §§643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5. Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than 18 months. [10 CSR 10-

6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(5)(C)(1)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065(5)(C)(1)]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

1. The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos.
2. The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1. The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
2. The permittee may be required by the director to file additional reports.
3. Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4. The permittee shall submit a full EIQ for the 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
5. In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060(5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
6. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
7. The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
8. The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the 12-month period immediately preceding the end of the reporting period.
9. The permittee shall collect, record, and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of PM to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive PM emissions to go beyond the premises of origin in quantities that the PM may be found on surfaces beyond the property line of origin. The nature or origin of the PM shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2. The permittee shall not cause nor allow to occur any fugitive PM emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

1. The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.
2. The permittee shall maintain the following monitoring schedule:
 - a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance.
 - b) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once every two weeks for a period of eight weeks.
 - ii) If a violation is noted, monitoring reverts to weekly.
 - iii) Should no violation of this regulation be observed during this period then-
 - (1) The permittee may observe once per month.
 - (2) If a violation is noted, monitoring reverts to weekly.
 - c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

1. The permittee shall document all readings on Attachment B, or its equivalent, noting the following:
 - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.

- b) Whether equipment malfunctions contributed to an exceedance.
- c) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.

- c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
- d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in 40 CFR Part 82, Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A - Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B - Servicing of MVACs. The term "motor vehicle" as used in 40 CFR Part 82, Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in 40 CFR Part 82, Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program promulgated pursuant to 40 CFR Part 82, Subpart G - Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

1. The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
2. Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;

- b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the CFR and CSR for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.065(5)(E)2 Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(5)(C)1 General Recordkeeping and Reporting Requirements

1. Recordkeeping
 - a) All required monitoring data 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.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2. Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) April 1st for monitoring which covers the January through December time period.
 - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined at 10 CSR 10-6.065(5)(C)1 shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(5)(C)1 Risk Management Plan Under §112(r)

1. The permittee shall comply with the requirements of 40 CFR Part 68 - Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by §68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:
 - a) June 21, 1999;
 - b) Three years after the date on which a regulated substance is first listed under §68.130; or
 - c) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(5)(C)1.A General Requirements

1. The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2. The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3. The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4. This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5. The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
6. Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios

If future HCl testing on the EP3.1 Five Melt Furnaces indicates a controlled emission factor higher than 0.075 lb HCl/ton of aluminum produced, the installation shall track their monthly and 12-month rolling total HCl emissions to ensure they do not exceed 10.0 tpy.

The HCl emission factor shall be calculated as the higher of the following two emission factors:

South baghouse HCl emission factor =

$$\frac{\text{South baghouse HCl average emission rate } \left(\frac{\text{lb}}{\text{hr}}\right)}{\text{Avg. production rate of furnace \#1 } \left(\frac{\text{tons}}{\text{hr}}\right) + \text{Avg. production rate of furnace \#2 } \left(\frac{\text{tons}}{\text{hr}}\right)}$$

North baghouse HCl emission factor =

$$\frac{\text{North baghouse HCl average emission rate } \left(\frac{\text{lb}}{\text{hr}}\right)}{\text{Avg. production rate of furnace \#3 } \left(\frac{\text{tons}}{\text{hr}}\right) + \text{Avg. production rate of furnace \#4 } \left(\frac{\text{tons}}{\text{hr}}\right) + \text{Avg. production rate of furnace \#5 } \left(\frac{\text{tons}}{\text{hr}}\right)}$$

The stack tested baghouse emission rates are post control; therefore, no additional control efficiency shall be included in the above calculations.

10 CSR 10-6.065(5)(B)4, (C)1, and (C)3 Compliance Requirements

1. Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3. All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4. The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air

Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:

- a) The identification of each term or condition of the permit that is the basis of the certification;
- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(5)(C)1 Emergency Provisions

1. An emergency or upset as defined in 10 CSR 10-6.065(5)(C)1 shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2. Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(5)(C)5 Off-Permit Changes

1. Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification. Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Chad Gilliatt, EHS Specialist. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the permittee shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the permittee to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(5)(E)4 Reopening-Permit for Cause

1. This permit may be reopened for cause if:
 - a) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
 - b) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - i) The permit has a remaining term of less than three years;
 - ii) The effective date of the requirement is later than the date on which the permit is due to expire; or
 - iii) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
 - c) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(5)(E)1.A Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A
 0797-003B NO_x Compliance Worksheet

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Emission Point	Description	Monthly Usage	NO _x Emission Factor	NO _x Emissions ¹ (tons)
EP-1	Thermal Chip Dryer	tons	0.9 lb/ton	
EP-3.3	Pouring/Casting	tons	0.01 lb/ton	
EP-4	Natural Gas Combustion	MMscf	100 lb/MMscf	
Monthly NO_x Emissions² (tons):				
12-Month Rolling Total NO_x Emissions³ (tons):				

¹NO_x Emissions (tons) = Monthly Usage x NO_x Emission Factor x 0.0005

²Monthly NO_x Emissions (tons) = The sum of NO_x Emissions (tons) from each emission point

³12-Month Rolling Total NO_x Emissions (tons) = This month's Monthly NO_x Emissions (tons) + the previous 11 month's Monthly NO_x Emissions (tons). **12-Month Rolling Total NO_x Emissions of less than 65.04 tons indicates compliance with Permit Condition 002.**

Attachment C
 10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.400 *Restriction of Emission of PM From Industrial Processes*.

Allowable PM Emission Rate (E) for Process Weights (P) of less than or equal to 30 tph is calculated by:

$$E \text{ (lb/hr)} = 4.1(P)^{0.67}$$

Allowable PM E for P greater than 30 tph is calculated by:

$$E \text{ (lb/hr)} = 55(P)^{0.11} - 40$$

Potential PM Emission Rate = MHDR (tph) x Emission Factor (lb/ton)

$$\text{Potential PM Concentration} = \frac{\text{Potential PM Emission Rate (lb/hr)} \times 7000 \text{ (gr/lb)}}{\text{Stack Flowrate (scfm)} \times 60 \text{ (min/hr)}}$$

Uncontrolled Calculations

Emission Unit	Description	MHDR (tph)	Emission Factor (lb/ton)	Potential PM Emission Rate (lb/hr)	PM Emission Limit (lb/hr)	Potential PM Conc. (gr/scf)	PM Conc. Limit (gr/scf)
EP-3.4	Dross Cooling	0.91	1.1	1.00	3.85	N/A	0.3

AP-42 does not contain emission factors for dross cooling at secondary aluminum plants; therefore, emissions from dross cooling were estimated using an emission factor obtained from AP-42, Section 12.5.1 "Minimills" (April 2009). This emission unit is not currently routed to a stack.

STATEMENT OF BASIS

Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than 18 months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1. Intermediate Operating Permit Application, received March 9, 2012
2. 2011, 2010, 2009, 2008, and 2007 Emissions Inventory Questionnaires
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
4. Construction Permit 0797-003, Issued June 17, 1997
5. Construction Permit 0797-003A, Issued September 10, 1998
6. Construction Permit 0797-003B, Issued April 29, 2013
7. Construction Permit 102000-037, Issued October 17, 2000
8. Construction Permit 102000-037A, Issued June 4, 2013:

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100 *Alternate Emission Limits* is not applicable because the installation is in an ozone attainment area.

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is not applicable to the installation and has not been applied within this permit.

- ♦ EP-4 Natural Gas Combustion Sources are exempt from this regulation per 10 CSR 10-6.260(1)(A)2 as combustion equipment that exclusively combusts pipeline grade natural gas.
- ♦ EP3.3 Pouring/Casting reports emissions under FIRE Process SCC 30400114 which includes an emission factor of 0.02 pounds SO_x per ton of aluminum; however, investigation into the source of the 30400114 emission factors indicates the emission factors were adopted from the gray iron industry as none were available for aluminum (see "Criteria Pollutant Emission Factors for the 1985 NAPAP Emissions Inventory" (EPA/600/7-87/015)). During the manufacturing process to produce iron, sulfur is added to improve the machinability of the iron. Sulfur is not added to aluminum during the aluminum manufacturing process; therefore, EP3.3 Pouring/Casting is not a sulfur emission source and is not subject to 10 CSR 10-6.260.

10 CSR 10-6.405 *Restriction of PM Emissions From Fuel Burning Equipment Used For Indirect Heating* is not applicable to the installation and has not been applied within this permit. 10 CSR 10-6.405(1)(E) exempts installations fueled exclusively by natural gas.

Construction Permit History

Construction Permit 0797-003, Issued June 17, 1997:

Construction Permit 0797-003A, Issued September 10, 1998:

Construction Permit 0797-003B, Issued April 29, 2013:

- ◆ This general construction permit is for the installation of E1 Scrap Dryer, Melt Furnaces #1 and #2 reported under E3, three holding furnaces, and a space heater.
- ◆ Amendment A modified the applicable requirements.
- ◆ Amendment B modifies the special conditions.
- ◆ Special Condition 1 states that the conditions of 0797-003B supersede all special conditions found in 0797-003 and 0797-003A.
- ◆ Special Conditions 2, 4, 5.A, and 6 have been applied within this permit (see Permit Condition 002).
- ◆ Special Conditions 3, 5.B, and 6 have been applied within this permit (see Permit Condition 003).

Construction Permit 102000-037, Issued October 17, 2000:

Construction Permit 102000-037A, Issued June 4, 2013:

- ◆ This de minimis construction permit is for the installation Melt Furnace #3 reported under E3.
- ◆ Amendment A modifies the special conditions.
- ◆ Special Condition 1 states that the conditions of 102000-037A supersede all special conditions found in 102000-037.
- ◆ Special Conditions 2, 3, and 4 have been applied within this permit (see Permit Condition 001). The permittee conducted stack testing demonstrating compliance

New Source Performance Standards Applicability

None.

Maximum Achievable Control Technology Applicability

40 CFR Part 63, Subpart RRR – *National Emission Standards for HAP for Secondary Aluminum Production* is applicable to the installation and has been applied within this permit (see Permit Condition 005). The installation is not a major source of HAP; therefore, the installation does not meet the applicability of §63.1500(b). As a synthetic minor source of HCl the installation is only required to meet the D/F emissions standards per §63.1500(c).

40 CFR Part 63, Subpart ZZZZZZ – *National Emission Standards for HAP: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries* is not applicable to the installation and has not been applied within this permit. The definition of *aluminum foundry* in §63.11556 specifically excludes “primary and secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.”

National Emission Standards for Hazardous Air Pollutants Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Other Regulatory Determinations

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Condition 004). This regulation is applicable to EP-4 Natural Gas Combustion Sources; however, each individual natural gas combustion sources has potential PM emissions below 0.5 lb/hr and is assumed to be in compliance with this regulation. No monitoring, recordkeeping, or reporting is required for EP-4 Natural Gas Combustion Sources at this time.

10 CSR 10-6.400 *Restriction of Emission of PM From Industrial Processes* is applicable to the installation and has been applied within this permit (see Permit Condition 006). EP-2 Scrap Crusher, EP-3.1 Five Melt Furnaces, and EP-3.2 Flux are exempt from this regulation per 10 CSR 10-6.400(1)(B)15 has they are subject to a federally enforceable requirement to install, operate, and maintain a PM control device system that controls at least 90 percent of PM emissions (see Permit Conditions 001 and 003).

Potential to Emit

The installation’s Potential to Emit:

Pollutant	Potential to Emit (tpy)
PM	15.43
PM ₁₀	12.98
PM _{2.5}	12.25
SO _x	0.57
NO _x	75.78
VOC	52.11
CO	79.82
GHG	114,865.00 ¹
HAP	14.16
Hydrogen Chloride	1.09
Hexane	1.71

¹The installation was limited to 1,654 MMscf of natural gas combustion per year by Permit Condition PW001 (which results in emissions below 100,000 tpy of GHG see Attachment D) to become a synthetic minor source of GHG and obtain this Intermediate Operating Permit.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

1. The specific pollutant regulated by that rule is not emitted by the installation.
2. The installation is not in the source category regulated by that rule.
3. The installation is not in the county or specific area that is regulated under the authority of that rule.
4. The installation does not contain the type of emission unit which is regulated by that rule.
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Alana L. Rugen, P.E.
Environmental Engineer III

Mr. Chad Gilliatt
Missouri Smelting Technology, Inc.
50 Cherry Blossom Way
Troy, MO 63379

Re: Missouri Smelting Technology, Inc., 113-0046
Permit Number: **OP2014-006**

Dear Mr. Gilliatt:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo §643.078.16 and §621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Alana Rugen at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS/ark

Enclosures

c: St. Louis Regional Office
PAMS File: 2012-03-036