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: OP2013-019
Expiration Date: APR 14 2018
Installation ID: 183-0077
Project Number: 2012-01-111

Installation Name and Address
O'Fallon Casting, LLC
600 Cannonball Lane
O'Fallon, MO 63366
St. Charles County

Parent Company's Name and Address
O'Fallon Casting, LLC
P.O. Box 280
O'Fallon, MO 63366

Installation Description:
O'Fallon Casting, LLC is a nonferrous investment aluminum and copper casting manufacturing plant. The installation is a synthetic minor source of Volatile Organic Compounds (VOCs).

As part of the process, the installation forms ceramic shells from wax patterns with a coated slurry, sand, and various flours. As the volatile components of the slurry evaporate, a ceramic shell is formed. These shells are used to cast molten aluminum and copper alloys into the casting products.

APR 15 2013

Effective Date

Director or Designee
Department of Natural Resources
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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

O'Fallon Casting, LLC is a nonferrous investment aluminum and copper casting manufacturing plant. The installation is a synthetic minor source of Volatile Organic Compounds (VOCs).

As part of the process, the installation forms ceramic shells from wax patterns with a coated slurry, sand, and various flours. As the volatile components of the slurry evaporate, a ceramic shell is formed. These shells are used to cast molten aluminum and copper alloys into the casting products.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM$_{10}$)</td>
<td>0.14</td>
<td>0.63</td>
<td>0.66</td>
<td>0.69</td>
<td>0.71</td>
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<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM$_{2.5}$)</td>
<td>0.14</td>
<td>0.54</td>
<td>0.57</td>
<td>0.60</td>
<td>0.63</td>
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<tr>
<td>Sulfur Oxides (SO$_x$)</td>
<td>0.01</td>
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<tr>
<td>Nitrogen Oxides (NO$_x$)</td>
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<td>1.85</td>
<td>1.85</td>
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<td>2.75</td>
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<td>Volatile Organic Compounds (VOC)</td>
<td>26.09</td>
<td>45.72</td>
<td>72.94</td>
<td>89.98</td>
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<td>Carbon Monoxide (CO)</td>
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<td>1.55</td>
<td>1.55</td>
<td>1.72</td>
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<tr>
<td>Ammonia (NH$_3$)</td>
<td>0.96</td>
<td>1.04</td>
<td>2.11</td>
<td>1.59</td>
<td>1.46</td>
</tr>
<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>0.07</td>
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</tr>
<tr>
<td>Hydrogen Fluoride (7664-39-3)</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-12</td>
<td>Aluminum Melting Pots - Process</td>
</tr>
<tr>
<td>EP-17</td>
<td>Hand Sanding</td>
</tr>
<tr>
<td>EU0001</td>
<td>Gate Grinding</td>
</tr>
<tr>
<td>EU0002</td>
<td>(2) Hand Sanders</td>
</tr>
</tbody>
</table>
EMISSION UNITS WITHOUT LIMITATIONS
The following list provides a description of the equipment, which does not have unit specific limitations at the time of permit issuance.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-02</td>
<td>Wax Assembly – 0.0275 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-03</td>
<td>Wax Assembly – 0.0275 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-04</td>
<td>Shell Building</td>
</tr>
<tr>
<td>EP-05</td>
<td>Autoclave/Boiler – 4.62 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-06</td>
<td>Wax Burnout Furnace 1 – 1.75 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-07</td>
<td>Wax Burnout Furnace 2 – 1.75 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-08</td>
<td>Wax Burnout Furnace 3 – 1.75 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-09</td>
<td>Preheat Foundry Furnace 1 – 0.735 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-10</td>
<td>Preheat Foundry Furnace 2 – 0.735 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-13</td>
<td>Pouring/Casting Aluminum</td>
</tr>
<tr>
<td>EP-14</td>
<td>Copper Alloy Melting</td>
</tr>
<tr>
<td>EP-15</td>
<td>Copper Alloy Casting</td>
</tr>
<tr>
<td>EP-16</td>
<td>Acid Bath Line</td>
</tr>
<tr>
<td>EP-19</td>
<td>T-6 Aging Furnace 1 – 0.084 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-20</td>
<td>Comfort Heating Units – 4.31 MMBtu/hr, Natural Gas</td>
</tr>
<tr>
<td>EP-21</td>
<td>T-6 Aging Furnace 2 – 0.35 MMBtu/hr, Natural Gas</td>
</tr>
</tbody>
</table>
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 10-6.060 Construction Permits Required |
| Construction Permit 062011-001, Issued June 7, 2011 |

**Emission Limitation:**
Special Condition 1.A: The permittee shall emit into the atmosphere less than 100 tons of VOC from the entire installation in any consecutive 12-month period.

**Monitoring/Recordkeeping:**
1. Special Condition 1.B: Attachment A or equivalent forms, such as electronic forms, which contain the same calculation method as Attachment A shall be used each month to demonstrate compliance.
2. Special Condition 2: 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.

**Reporting:**
1. Special Condition 3: 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 an exceedance of the 100 ton VOC limit.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit and 40 CFR Part 63, Subpart ZZZZZZ.

**PERMIT CONDITION PW002**

| 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations |
| 40 CFR Part 63, Subpart ZZZZZZ – National Emission Standards for Hazardous Air Pollutants Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries |

**Applicability**
1. The permittee is subject to 40 CFR Part 63, Subpart ZZZZZZ as they operate an aluminum and copper foundry that is an area source of HAP emissions as defined in §63.2 and meets the criteria specified in §63.11544(a)(1), (2), and (4). The permittee will remain subject to 40 CFR Part 63, Subpart ZZZZZZ even if they subsequently do not meet the criteria in §63.11544(a)(1), (2), and (4). [§63.11544(a)]
   a) The aluminum foundry uses material containing aluminum foundry HAP, as defined in §63.11556; or [§63.11544(a)(1)]
   b) The copper foundry uses material containing copper foundry HAP, as defined in §63.11556. [§63.11544(a)(2)]
c) The aluminum foundry or copper foundry has an annual metal melt capacity of at least 600 tons per year of aluminum and/or copper, including all associated alloys. The annual metal melt capacity was determined according to §63.11544(a)(4)(ii) and (iv). [§63.11544(a)(4)]

1. A reconstructed melting operation at an aluminum or copper foundry after February 9, 2009, must determine applicability based on the facility's annual metal melt capacity at startup. [§63.11544(a)(4)(ii)]

2. If a reconstructed melting operation has increased capacity after startup such that the annual metal melt capacity equals or exceeds 600 tpy, the permittee shall submit a written notification of applicability to the Administrator within 30 days after the capacity increase year and comply at the time of the capacity increase. [§63.11544(a)(4)(iv)]

Compliance Date:
Reconstructed sources shall achieve compliance with the provisions of this subpart upon startup of the reconstructed affected source. [§63.11545(c)]

Standards and Management Practices:
1. Reconstructed aluminum foundries and/or copper foundries shall comply with the following requirements: [§63.11550(a)]
   a) Cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable (e.g., except when access is needed; including, but not limited to charging, alloy addition, and tapping). [§63.11550(a)(1)]
   b) Purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP (as applicable) in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. This requirement does not apply to material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns). [§63.11550(a)(2)]
   c) Prepare and operate pursuant to a written management practices plan. The management practices plan shall include the required management practices in §63.11550(a)(1) and (2) and may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. The permittee shall inform the appropriate employees of the management practices that they must follow. The permittee may use the standard operating procedures as the management practices plan provided the standard operating procedures include the required management practices in §63.11550(a)(1) and (2). [§63.11550(a)(3)]

2. The installation is currently classified as a small foundry, if the installation subsequently becomes a large foundry, the permittee shall meet the requirements in §63.11550(c)(1) through (3). [§63.11550(c)]

3. These standards apply at all times. [§63.11550(d)]

Monitoring:
The permittee shall record the information specified in §63.11553(c)(2) to document conformance with the management practices plan required in §63.11550(a). [§63.11552(a)]

Notifications, Recordkeeping, and Reporting:
1. The permittee shall submit the Initial Notification required by §63.9(b)(2) no later than 120 calendar days after the source becomes subject to the standard. The Initial Notification shall include the
information specified in §63.11553(a)(1) through (3) and may be combined with the Notification of Compliance Status required in §63.11553(b). [§63.11553(a)]

a) The name and address of the owner or operator; [§63.11553(a)(1)]
b) The address (i.e., physical location) of the affected source; and [§63.11553(a)(2)]
c) An identification of the relevant standard, or other requirement, that is the basis of the notification and source's compliance date. [§63.11553(a)(3)]

2. The permittee shall submit the Notification of Compliance Status required by §63.9(h) no later than 120 days after startup of the reconstructed source. The Notification of Compliance Status shall indicate that the installation is a small foundry as defined in §63.11556 and the annual capacity as the basis for the determination. In addition to the information required in §63.9(h)(2) and §63.11551, the notification shall include the following certification(s) of compliance, as applicable, and signed by a responsible official: [§63.11553(b)]

a) “This facility will operate in a manner that minimizes HAP emissions from the melting operations to the extent possible. This includes at a minimum that the owners and/or operators of the affected source will cover or enclose each melting furnace that is equipped with a cover or enclosure during melting operations to the extent practicable as required in 63.11550(a)(1).” [§63.11553(b)(1)]

b) “This facility agrees to purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundries HAP (as applicable) in the materials charged to the melting furnace, except for metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting as required by 63.11550(a)(2).” [§63.11553(b)(2)]

c) “This facility has prepared and will operate by a written management practices plan according to § 63.11550(a)(3).” [§63.11553(b)(3)]

3. The permittee shall retain the following records: [§63.11553(c)]

a) As required in §63.10(b)(2)(xiv), the permittee shall retain a copy of each notification that the permittee has submitted to comply with 40 CFR Part 63, Subpart ZZZZZZZ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee has submitted. [§63.11553(c)(1)]

b) The permittee shall retain records to document conformance with the management practices plan required by §63.11550 as follows: [§63.11553(c)(2)]

i) For melting furnaces equipped with a cover or enclosure, records shall identify each melting furnace equipped with a cover or enclosure and document that the procedures in the management practices plan were followed during the monthly inspections. These records may be in the form of a checklist. [§63.11553(c)(2)(i)]

ii) Records documenting that the permittee purchased only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If the permittee purchases scrap metal specifically for the HAP metal content for use in alloying or to meet specifications for the casting, the permittee shall retain records to document that the HAP metal is included in the material specifications for the cast metal product. [§63.11553(c)(2)(ii)]

c) The permittee shall retain the records of all inspections and monitoring data required by §63.11552, and the following information for each required inspection or monitoring: [§63.11553(c)(3)]

i) The date, place, and time of the monitoring event; [§63.11553(c)(3)(i)]

ii) Person conducting the monitoring; [§63.11553(c)(3)(ii)]

iii) Technique or method used; [§63.11553(c)(3)(iii)]
iv) Operating conditions during the activity; [§63.11553(c)(3)(iv)]
v) Maintenance or corrective action taken (if applicable). [§63.11553(c)(3)(vi)]
d) The permittee shall retain records to document that the facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year. [§63.11553(c)(4)]

4. Records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), the permittee shall retain each record for five years following the date of each recorded action. The permittee shall retain each record onsite for at least two years after the date of each recorded action according to §63.10(b)(1). The permittee may retain the records offsite for the remaining three years. [§63.11553(d)]

5. If a deviation occurs during a semiannual reporting period, the permittee shall submit a compliance report to the permitting authority according to the following requirements: [§63.11553(e)]
a) The first reporting period covers the period beginning on the compliance date specified in §63.11545 and ending on June 30th or December 31st, whichever date comes first after the compliance date. Each subsequent reporting period covers the semiannual period from January 1st through June 30th or from July 1st through December 31st. The compliance report shall be postmarked or delivered no later than July 31st or January 31st, whichever date comes first after the end of the semiannual reporting period. [§63.11553(e)(1)]
b) A compliance report shall include the following information: [§63.11553(e)(2)]
i) Company name and address. [§63.11553(e)(2)(i)]
ii) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the content of the report. [§63.11553(e)(2)(ii)]
iii) Date of the report and beginning and ending dates of the reporting period. [§63.11553(e)(2)(iii)]
iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken. [§63.11553(e)(2)(iv)]

6. Records may be kept in either written or electronic form.

7. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.

8. The permittee shall report any deviations from the standards and management practices, monitoring, and notifications, recordkeeping, and reporting requirements of this permit condition in the semiannual monitoring report and compliance certification required by Section V of this permit and 40 CFR Part 63, Subpart ZZZZZZ.

General Provisions:
The permittee shall refer to Table 1 to 40 CFR Part 63, Subpart ZZZZZZ for 40 CFR Part 63, Subpart A applicability. [§63.11555]

Definitions:
1. Terms used in 40 CFR Part 63, Subpart ZZZZZZ are defined in the Clean Air Act, in §63.2, and as follows: [§63.11556]
   a) Aluminum foundry means a facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except die casting) that are complex shapes. This definition does not include primary or secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.
   b) Aluminum foundry HAP means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form.
c) *Annual copper and other nonferrous foundry metal melt capacity* means, for new affected sources, the lower of the copper and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year. Unless otherwise specified in the permit, permitted copper and other nonferrous metal melting operation rates that are not specified on an annual basis shall be annualized assuming 24 hours per day, 365 days per year of operation.

d) *Annual metal melt capacity* means, for new affected sources, the lower of the aluminum, copper, and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year. Unless otherwise specified in the permit, permitted aluminum, copper, and other nonferrous metal melting operation rates that are not specified on an annual basis shall be annualized assuming 24 hours per day, 365 days per year of operation.

e) *Annual metal melt production* means, for existing affected sources, the quantity of aluminum, copper, and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, annual metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

f) *Copper foundry* means a foundry that melts copper or copper-based alloys and pours molten copper or copper-based alloys into molds to manufacture copper or copper-based alloy castings (excluding die casting) that are complex shapes. This definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods, or copper cake.

g) *Copper foundry HAP* means any compound of any of the following metals: lead, manganese, or nickel, or any of these metals in the elemental form.

h) *Deviation* means any instance where an affected source:

i) Fails to meet any requirement or obligation established by 40 CFR Part 63, Subpart ZZZZZZ, including but not limited to any work practice standard;

ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in 40 CFR Part 63, Subpart ZZZZZZ and that is included in the operating permit for any affected source required to obtain such a permit; or

iii) *Die casting* means operations classified under the North American Industry Classification System codes 331521 (Aluminum Die-Casting Foundries) and 331522 (Nonferrous (except Aluminum) Die-Casting Foundries) and comprises establishments primarily engaged in introducing molten aluminum, copper, and other nonferrous metal, under high pressure, into molds or dies to make die-castings.

iv) *Material containing aluminum foundry HAP* means a material containing one or more aluminum foundry HAP. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing aluminum foundry HAP.

v) *Material containing copper foundry HAP* means a material containing one or more copper foundry HAP. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing copper foundry HAP.
vi) *Material containing other nonferrous foundry HAP* means a material containing one or more other nonferrous foundry HAP. Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing other nonferrous foundry HAP.

vii) *Melting operations* (the affected source) means the collection of furnaces (e.g., induction, reverberatory, crucible, tower, dry hearth) used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings.

viii) *Other nonferrous foundry* means a facility that melts nonferrous metals other than aluminum, copper, or copper-based alloys and pours the nonferrous metals into molds to manufacture nonferrous metal castings (excluding die casting) that are complex shapes. This definition does not include primary or secondary metal producers that cast molten nonferrous metals to produce simple shapes such as sows, ingots, bars, rods, or billets.

ix) *Other nonferrous foundry HAP* means any compound of the following metals: chromium, lead, and nickel, or any of these metals in the elemental form.

x) *Small foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons.
III. Emission Unit Specific 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 001
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-12</td>
<td>Aluminum Melting Pots – Process Emissions</td>
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<tr>
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<td>Hand Sanding</td>
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<td>Gate Grinding</td>
</tr>
<tr>
<td>EU0002</td>
<td>(2) Hand Sanders</td>
</tr>
</tbody>
</table>

**Emission Limitation:**
1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent. [10 CSR 10-6.220(3)(A)]
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent. [10 CSR 10-6.220(3)(B)]

**Monitoring:**
1. The permittee shall conduct opacity readings on these emission sources using U.S. EPA Test Method 22-like procedures. Readings are only required when the emission sources are operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall either conduct a Method 9 observation or implement corrective action(s).
2. The following monitoring schedule shall be maintained:
   a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then:
   b) Observations shall be conducted once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then:
   c) Observations shall be conducted once per month. If a violation is noted, monitoring reverts to weekly.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**
1. The permittee shall maintain records of all Method 22-like observation results using Attachment B, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
2. The permittee shall maintain records of all Method 9 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
3. The permittee shall maintain records of any equipment malfunctions using Attachment D or an equivalent form generated by the permittee.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
6. All records shall be maintained for five years.

**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 any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit and 40 CFR Part 63, Subpart ZZZZZZ.

### PERMIT CONDITION 002

**10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-12</td>
<td>Aluminum Melting Pots – Process Emissions</td>
</tr>
<tr>
<td>EP-17</td>
<td>Hand Sanding</td>
</tr>
<tr>
<td>EU0001</td>
<td>Gate Grinding</td>
</tr>
<tr>
<td>EU0002</td>
<td>(2) Hand Sanders</td>
</tr>
</tbody>
</table>

**Emission Limitations:**
1. The permittee shall not emit particulate matter in excess of: [10 CSR 10-6.400(3)(A)1]

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Particulate Emission Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-12</td>
<td>Aluminum Melting Pots – Process Emissions</td>
<td>1.48</td>
</tr>
<tr>
<td>EP-17</td>
<td>Hand Sanding</td>
<td>1.48</td>
</tr>
<tr>
<td>EU0001</td>
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</tr>
<tr>
<td>EU0002</td>
<td>(2) Hand Sanders</td>
<td>1.48</td>
</tr>
</tbody>
</table>

2. The permittee shall not cause, allow, or permit the emission of particulate matter from any source in a concentration in excess of 0.30 gr/scf of exhaust gases. [10 CSR 10-6.400(3)(A)4]

**Monitoring/Recordkeeping:**
1. The permittee shall maintain an operating and maintenance log for each emission unit using Attachment D or an equivalent form generated by the permittee. The record shall be maintained in hard copy or electronic form. The log(s) shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc; and
2. The permittee shall retain a copy of the manufacturer’s specifications.
3. The permittee shall retain Attachment E which contains calculations documenting that the permittee is in compliance with the particulate matter emission limits without the aid of a control device.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
6. All records shall be maintained for five years.

**Reporting:**
The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit and 40 CFR Part 63, Subpart ZZZZZZ.
IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (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 premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
      i) St. Louis metropolitan area. The open burning of household refuse is prohibited;
   b) Yard waste, with the following exceptions:
      i) St. Louis metropolitan area. The open burning of trees, tree leaves, brush, or any other type of vegetation is limited to the period beginning September 16th and ending April 14th of each calendar year and limited to a total base area not to exceed 16 square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;

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. The permittee 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 the permittee fails to comply with the provisions or any condition of the open burning permit.
   a) In a nonattainment area, as defined at 10 CSR 10-6.020(2)(N)5., the director shall not issue a permit under this section 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.

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 the 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 listed information 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 listed information 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 eighteen months. [10 CSR 10-6.065(B)(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)]


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 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. The permittee must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

### 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 sections (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\textsuperscript{st} 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\textsuperscript{st}.

8. The reporting period shall end on December 31\textsuperscript{st} 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.

\section*{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.

\section*{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.

\section*{10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin}

\textbf{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 particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter 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 particulate matter 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 F, 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 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited
It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves, and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.
**10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

**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 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area**

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

1. Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
2. Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per 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 Missouri Department of Natural Resources’ Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources’ 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 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).

ey) 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 (fleets) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in 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. Federally enforceable only.

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 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 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:
      1. April 1st for monitoring which covers the January through December time period.
      2. 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.
   1. Notice of any deviation resulting from an emergency (or upset) condition as defined in 10 CSR 10-6.065(6)(C)7 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.
   2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported as soon as practicable.
3. 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 Section 112(r)**

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:

1. Three years after the date on which a regulated substance is first listed under §68.130; or
2. 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 Operating 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**

None.
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 semiannually (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(6)(C)7.A 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 Mr. Vince Gimeno, General Manager. 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 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:
1. 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,

2. Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) 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,

3. 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**

**VOC Tracking Sheet**

Date (Month and Year):

<table>
<thead>
<tr>
<th>Emission Unit(s)</th>
<th>Description</th>
<th>Amount Used this Month</th>
<th>VOC Emission Factor</th>
<th>VOC Emissions¹ (ton/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>Isopropanol</td>
<td>tons</td>
<td>1788²</td>
<td>lb/ton</td>
</tr>
<tr>
<td></td>
<td>Dynasol R40</td>
<td>tons</td>
<td>1078³</td>
<td>lb/ton</td>
</tr>
<tr>
<td></td>
<td>Synasol Solvent 190</td>
<td>tons</td>
<td>1681⁴</td>
<td>lb/ton</td>
</tr>
<tr>
<td>EP-12</td>
<td>Aluminum Melting Pots – Process Emissions</td>
<td>tons</td>
<td>0.2</td>
<td>lb/ton</td>
</tr>
<tr>
<td>EP-13</td>
<td>Pouring/Casting Aluminum</td>
<td>tons</td>
<td>0.14</td>
<td>lb/ton</td>
</tr>
</tbody>
</table>

**Installation-wide VOC Emissions⁵ (ton/month):**

<table>
<thead>
<tr>
<th>Date (Month and Year)</th>
<th>Installation-wide 12-Month Rolling Total VOC Emissions⁶ (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
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<tr>
<td>May</td>
<td></td>
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<tr>
<td>June</td>
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<td>July</td>
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<td>August</td>
<td></td>
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<tr>
<td>September</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td></td>
</tr>
</tbody>
</table>

¹VOC Emissions (ton/month) = Amount Used this Month x VOC Emission Factor x 0.0005 ton/lb.
²MSDS indicates 100% VOC, the emission factor was reduced as stack testing indicates 10.6% retention of VOC in the ceramic shell.
³MSDS indicates 60.3% VOC, the emission factor was reduced as stack testing indicates 10.6% retention of VOC in the ceramic shell.
⁴MSDS indicates 94% VOC, the emission factor was reduced as stack testing indicates 10.6% retention of VOC in the ceramic shell.
⁵Installation-wide VOC Emissions (ton/month) = the sum of VOC Emissions for each Emission Unit(s).
⁶Installation-wide 12-Month Rolling Total VOC Emissions (ton/year) = This month’s Installation-wide VOC Emissions (ton/month) + the previous 11 month’s VOC Emissions (ton/month).
## Attachment B
Method 22-like Opacity Observations

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Emission Source</th>
<th>Visible Emissions</th>
<th>Excess Emissions</th>
<th>Cause</th>
<th>Corrective Action</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td>Yes¹</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹If there are visible emissions, the permittee shall perform corrective action(s) to remove the visible emissions or perform a Method 9 Opacity Observation to quantify the visible emissions.
**Attachment C**

**Method 9 Opacity Observations**

<table>
<thead>
<tr>
<th>Company</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Observer Certification Date</td>
</tr>
<tr>
<td>Date</td>
<td>Emission Unit</td>
</tr>
<tr>
<td>Time</td>
<td>Control Device</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hour</th>
<th>Minute</th>
<th>Seconds</th>
<th>Steam Plume (check if applicable)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>15</td>
<td>30</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>Attached</td>
<td></td>
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<tr>
<td>0</td>
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<td></td>
<td>Detached</td>
<td></td>
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</tr>
</tbody>
</table>

**SUMMARY OF AVERAGE OPACITY**

<table>
<thead>
<tr>
<th>Set Number</th>
<th>Time</th>
<th>Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
</tr>
</tbody>
</table>

Readings ranged from _________ to _________ % opacity.

Was the emission unit in compliance at the time of evaluation?  

**Signature of Observer**
## Attachment D
Inspection/Maintenance/Repair/Malfunction Log

Emission Unit or CVM # ________________________________

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Inspection/Maintenance Activities</th>
<th>Malfunction Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Malfunction</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
ATTACHMENT E
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 Particulate Matter from Industrial Processes.

The allowable PM emission limitation for sources having a process weight rate (P) of 30 ton/hr or less:

\[ E = 4.1(P)^{0.67} \]

Potential PM Emission Rate = \( P \) (tons/hr) x PM Emission Factor (lb/ton)

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

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>( P ) (ton/hr)</th>
<th>PM Emission Factor (lb/ton)</th>
<th>Potential PM Emission Rate (lb/hr)</th>
<th>PM Emission Rate Limit (lb/hr)</th>
<th>Potential PM Conc. (gr/scf)</th>
<th>PM Conc. Limit (gr/scf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-12</td>
<td>0.21875</td>
<td>4.3</td>
<td>0.94</td>
<td>1.48</td>
<td>N/A</td>
<td>0.3</td>
</tr>
<tr>
<td>EP-17</td>
<td>0.21875</td>
<td>3.6</td>
<td>0.79</td>
<td>1.48</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>EU0001</td>
<td>0.21875</td>
<td>3.6</td>
<td>0.79</td>
<td>1.48</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>EU0002</td>
<td>0.21875</td>
<td>3.6</td>
<td>0.79</td>
<td>1.48</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

The PM emission factor for EP-12 Aluminum Melting Pots – Process Emissions was obtained from EPA’s Factor Information Retrieval System (WebFIRE) for Process SCC 30400103. Emissions from this source are currently not routed to a stack.

The PM emission factor for EP-17 Hand Sanding was obtained from WebFIRE for Process SCC 30400350. Emissions from this source are currently routed to Stack #17. Stack #17 was reported as having a flow rate of 909 ft³/min at 77°F in the installation’s 2011 EIQ.

The PM emission factor for EU0001 Gate Grinding and EU0002 (2) Hand Sanders were obtained from WebFIRE for Process SCC 30400350. Emissions from these sources are currently not routed to a stack.
## ATTACHMENT F
Fugitive Emission Observations

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Visible Emissions Beyond Property Boundary</th>
<th>Excess Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Cause</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes¹</td>
<td>Corrective Action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initial</td>
<td></td>
</tr>
</tbody>
</table>

¹If there are visible emissions beyond the property boundary the permittee shall complete the excess emissions columns.
STATEMENT OF BASIS

Voluntary Limitations
In order to qualify for this Intermediate 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 January 30, 2012
4) U.S. EPA’s Factor Information Retrieval System (WebFIRE)
5) Construction Permit 062011-001

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

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. 10 CSR 10-6.260(1)(A)2 exempts combustion equipment exclusively using pipeline grade natural gas.

10 CSR 10-6.405 Restriction of Particulate Matter 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 which exclusively combust natural gas.

Construction Permits
Since their previous Intermediate Operating Permit, the installation has received a No Construction Permit Required Determination, 2009-02-034. The determination was for the replacement of two existing natural gas melt furnaces with three new electric melt furnaces.

The installation has only been issued one construction permit to date:

Construction Permit 062011-001, Issued June 7, 2011:
- This general construction permit is for the installation of a Unitherm Electric Shell Pre-Heat Furnace. The furnace debottlenecked aluminum casting operations increasing production to 3500
New Source Performance Standards (NSPS) Applicability

None.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart RRR – National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production is not applicable to the installation and has not been applied within this permit. The installation performs aluminum casting using only clean aluminum charge and is not subject to this regulation per §60.1500(f).

40 CFR Part 63, Subpart FFFFFF – National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources is not applicable to the installation and has not been applied within this permit. The installation performs copper casting using only clean copper charge and does not meet the definition of secondary copper smelter in §63.11158.

40 CFR Part 63, Subpart ZZZZZZ – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries is applicable to the installation and has been applied within this permit (see Permit Condition PW002). Previously the installation was not subject to this regulation per §63.11544(a)(4)(i) as they were an existing source with annual production below 600 tpy; however, Construction Permit 062011-001 allowed the installation to increase aluminum production capacity meeting the definition of reconstruction under the subpart. As a reconstructed source applicability is based upon annual capacity. The installation’s annual capacity is 1,916.25 tpy which exceeds the 600 tpy applicability threshold in §63.11544(a)(4)(ii).

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart C – National Emission Standard for Beryllium is not applicable to the installation and has not been applied within this permit. The installation previously was subject to this regulation due to their processing of beryllium-copper alloys; however, the installation ceased processing beryllium-copper alloys on September 30, 2008 and is no longer subject to this regulation.

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).

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 ton/yr within 40 CFR Part 70. As of July 1, 2011, all Title V operating permits are required to include GHG emissions. Potential emissions of greenhouse gases (CO₂e) for this installation are calculated to be 9,201.30 tons, classifying the installation as a minor source of GHGs. Please note that the potential emissions of greenhouse gases from this installation are only for stationary sources as §70.2 defines emission unit as “any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act.”
Note: Missouri regulations do not require the installation to report CO2 emissions in their Missouri Emissions Inventory Questionnaire.

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 001). The regulation is also applicable to the following visible emission sources; however, as potential particulate emissions from these sources is less than 0.5 lb/hr they are assumed to be in compliance and have no monitoring, recordkeeping, or reporting at this time:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Potential to Emit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-02</td>
<td>Wax Assembly</td>
<td>0.0002</td>
</tr>
<tr>
<td>EP-03</td>
<td>Wax Assembly</td>
<td>0.0002</td>
</tr>
<tr>
<td>EP-05</td>
<td>Autoclave/Boiler</td>
<td>0.03</td>
</tr>
<tr>
<td>EP-06</td>
<td>Wax Burnout Furnace 1</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-07</td>
<td>Wax Burnout Furnace 2</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-08</td>
<td>Wax Burnout Furnace 3</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-09</td>
<td>Preheat Foundry Furnace 1</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-10</td>
<td>Preheat Foundry Furnace 2</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-14</td>
<td>Copper Alloy Melting</td>
<td>0.16</td>
</tr>
<tr>
<td>EP-15</td>
<td>Copper Alloy Casting</td>
<td>0.0001</td>
</tr>
<tr>
<td>EP-19</td>
<td>T-6 Aging Furnace 1</td>
<td>0.001</td>
</tr>
<tr>
<td>EP-20</td>
<td>Comfort Heating Units</td>
<td>0.04</td>
</tr>
<tr>
<td>EP-21</td>
<td>T-6 Aging Furnace 2</td>
<td>0.003</td>
</tr>
</tbody>
</table>

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes is applicable to the installation and has been applied within this permit (see Permit Condition 002). The regulation is not applicable to the following visible emission sources as 10 CSR 10-6.400(1)(B)12 exempts emission sources at maximum design capacity with potential particulate emissions of less than 0.5 lb/hr:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Potential to Emit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-02</td>
<td>Wax Assembly</td>
<td>0.0002</td>
</tr>
<tr>
<td>EP-03</td>
<td>Wax Assembly</td>
<td>0.0002</td>
</tr>
<tr>
<td>EP-05</td>
<td>Autoclave/Boiler</td>
<td>0.03</td>
</tr>
<tr>
<td>EP-06</td>
<td>Wax Burnout Furnace 1</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-07</td>
<td>Wax Burnout Furnace 2</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-08</td>
<td>Wax Burnout Furnace 3</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-09</td>
<td>Preheat Foundry Furnace 1</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-10</td>
<td>Preheat Foundry Furnace 2</td>
<td>0.01</td>
</tr>
<tr>
<td>EP-14</td>
<td>Copper Alloy Melting</td>
<td>0.16</td>
</tr>
<tr>
<td>EP-15</td>
<td>Copper Alloy Casting</td>
<td>0.0001</td>
</tr>
<tr>
<td>EP-19</td>
<td>T-6 Aging Furnace 1</td>
<td>0.001</td>
</tr>
<tr>
<td>EP-20</td>
<td>Comfort Heating Units</td>
<td>0.04</td>
</tr>
<tr>
<td>EP-21</td>
<td>T-6 Aging Furnace 2</td>
<td>0.003</td>
</tr>
</tbody>
</table>
The following emission sources have ceased operation and were not listed in the Operating Permit:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-01</td>
<td>Muratic Acid Tanks</td>
</tr>
<tr>
<td>EP-14A</td>
<td>Beryllium-Copper Alloy Melting</td>
</tr>
<tr>
<td>EP-15A</td>
<td>Beryllium-Copper Alloy Casting</td>
</tr>
<tr>
<td>EP-18</td>
<td>Natural Gas T-4 Annealing</td>
</tr>
<tr>
<td>EP-22</td>
<td>Aluminum Melting Furnace/Reverberatory - Combustion</td>
</tr>
</tbody>
</table>

Note: If the installation wishes to use these emission sources again, a construction permit is required.

In 2011, the installation replaced EP-11 Aluminum Melting Pots – Natural Gas Combustion with an electric aluminum melting pot. All of the aluminum melting pots are not electric; therefore, EP-11 was not included in the permit. Process emissions from the aluminum melting pots are reported under EP-12.

The determinations made within this permit are based upon the following installation-wide potential emissions:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit(^1) (tons per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>6.79</td>
</tr>
<tr>
<td>CO(_2)e</td>
<td>9,201.30</td>
</tr>
<tr>
<td>NH(_3)</td>
<td>2.32</td>
</tr>
<tr>
<td>NO(_x)</td>
<td>11.96</td>
</tr>
<tr>
<td>PM</td>
<td>15.91</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>5.48</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>4.93</td>
</tr>
<tr>
<td>SO(_x)</td>
<td>0.08</td>
</tr>
<tr>
<td>VOC</td>
<td>151.37(^2)</td>
</tr>
<tr>
<td>HAP</td>
<td>0.97</td>
</tr>
<tr>
<td>Methanol (67-56-1)</td>
<td>0.81</td>
</tr>
<tr>
<td>Hydrogen Fluoride (7664-39-3)</td>
<td>0.16</td>
</tr>
</tbody>
</table>

\(^1\)This PTE is based upon 8,760 annual hours of uncontrolled operation.
\(^2\)The installation was limited to 100 tons of VOC per year (see Permit Condition PW001) in order to obtain this Intermediate Operating Permit, without this Intermediate Operating Permit the installation’s potential would be the 151.37 tpy VOC shown.

**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, EIT
Environmental Engineer
Mr. Vince Gimeno  
O'Fallon Casting, LLC  
P.O. Box 280  
O'Fallon, MO 63366

Re: O'Fallon Casting, LLC, 183-0077  
    Permit Number: **OP2013-019**

Dear Mr. Gimeno:

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: 2012-01-111