

Facility ID: 0306020051 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Facility ID: 0306020051 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Aluminum Melt Furnace - (Jet Melter 1) 2.0 ton /hr, 3.6 mmBtu/hr - natural gas fired	OAC rule 3745-31-05 (A)(3) (PTI 03-17008 issued November 29, 2005)	2.2 lbs particulate emissions (PE) /hr, 9.64 tons PE /yr  2.1 lbs particulate matter less than 10 microns in size (PM10) /hr, 9.20 tons PM10 /yr  0.54 lbs nitrogen oxides (NOx) /hr, 2.37 tons NOx /yr  Visible PE shall not exceed 5 percent opacity, as a six-minute average.  See A.2.a See A.2.b See A.2.b
	OAC 3745-17-07 (A) OAC 3745-17-11 (B)(1)	

**2. Additional Terms and Conditions**

- (a) This facility, including this emission unit, is not subject to the requirements of 40 CFR 63.1500 et seq. (MACT Subpart RRR) per 40 CFR 63.1500(a) because the facility does not melt materials other than clean charge, internal scrap, and customer returns, and because the facility does not operate sweat furnaces, thermal chip dryers, or scrap dryers /delacquering kilns /decoating kilns (all as defined in 40 CFR 63.1503). See also section B.1.  
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

**B. Operational Restrictions**

1. The permittee shall melt only clean charge, internal scrap, and customer returns, as defined in 40 CFR 63.1503, in this emission unit.
 

Clean charge means furnace charge materials including molten aluminum, T-bar, sow, ingot, billet, pig, alloying elements, aluminum scrap (as defined in 40 CFR 63.1503) known by the permittee to be entirely free of paints, coatings, lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 deg C (650 deg F) or higher; aluminum scrap delacquered/decoated at 482 deg C (900 deg F) or higher, and runaround scrap (as defined in 40 CFR 63.1503).

Internal scrap means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

Customer returns means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (i.e., lacquers).
2. The permittee shall burn only natural gas in this emissions unit.

**C. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee deviated from the charge restrictions of section B.1 above, the permittee shall maintain a record of the type and quantity of such charge employed.
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify each day during which the permittee deviated from the charge restrictions of section B.1 above, and the type and quantity of such charge employed.  
  
The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:  
Emission Limitation:  
2.2 lbs PE /hr  
  
Applicable Compliance Method:  
The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 2.0 tons per hour by the emission factor for PE (1.1 lb PE per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)  
  
If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A - Methods 1-5.  
Emission Limitation:  
2.1 lbs PM10 /hr  
  
Applicable Compliance Method:  
The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 2.0 tons per hour by the emission factor for PM10 (1.05 lb PM10 per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)  
  
If required, the permittee shall demonstrate compliance with the gr/dscf limitation by testing in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.  
Emission Limitation:  
0.54 lbs NOx /hr  
  
Applicable Compliance Method:  
Compliance with the hourly emission limitation shall be determined by multiplying an emission factor of 0.15 lb NOx/mmBtu derived from STAPPA / ALAPCO Handbook Table 11-1 (05/91), by a maximum heat input of 3.6 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.  
Emission Limitation:  
9.64 tons PE /yr  
9.20 tons PM10 /yr  
2.37 tons NOx /yr  
  
Applicable Compliance Method:  
As long as compliance with the hourly PE, PM10, and NOx limitations is maintained, compliance with the annual limitations shall be assumed (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).  
Emission Limitation:  
Visible particulate emissions shall not exceed 5 percent opacity, as a six-minute average.  
  
Applicable Compliance Method:  
If required, compliance shall be determined in accordance with the test method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 0306020051 Emissions Unit ID: P003 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Aluminum Melt Furnace - (Reverberatory Melter 1) 3.25 ton /hr, 12 mmBtu/hr - natural gas fired	OAC rule 3745-31-05 (A)(3) (PTI 03-17008 issued November 29, 2005)	3.58 lbs particulate emissions (PE) /hr, 10.5 tons PE /yr  3.41 lbs particulate matter less than 10 microns in size (PM10) /hr, 9.98 tons PM10 /yr  1.80 lbs nitrogen oxides (NOx) /hr, 7.88 tons NOx /yr  Visible PE shall not exceed 5 percent opacity, as a six-minute average.  See A.2.a See A.2.b See A.2.b
	OAC 3745-17-07 (A) OAC 3745-17-11 (B)(1)	

**2. Additional Terms and Conditions**

- (a) This facility, including this emission unit, is not subject to the requirements of 40 CFR 63.1500 et seq. (MACT Subpart RRR) per 40 CFR 63.1500(a) because the facility does not melt materials other than clean charge, internal scrap, and customer returns, and because the facility does not operate sweat furnaces, thermal chip dryers, or scrap dryers /delacquering kilns /decoating kilns (all as defined in 40 CFR 63.1503). See also section B.1.  
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

**B. Operational Restrictions**

- 1. The permittee shall melt only clean charge, internal scrap, and customer returns, as defined in 40 CFR 63.1503, in this emission unit.
 

Clean charge means furnace charge materials including molten aluminum, T-bar, sow, ingot, billet, pig, alloying elements, aluminum scrap (as defined in 40 CFR 63.1503) known by the permittee to be entirely free of paints, coatings, lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 deg C (650 deg F) or higher; aluminum scrap delacquered/decoated at 482 deg C (900 deg F) or higher, and runaround scrap (as defined in 40 CFR 63.1503).

Internal scrap means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

Customer returns means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (i.e., lacquers).
- 2. The permittee shall burn only natural gas in this emissions unit.

3. The maximum aluminum production throughput for this emissions unit shall not exceed 19,000 tons per year.
- C. Monitoring and/or Record Keeping Requirements**
1. For each day during which the permittee deviated from the charge restrictions of section B.1 above, the permittee shall maintain a record of the type and quantity of such charge employed.
  2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
  3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
    - a. the color of the emissions;
    - b. whether the emissions are representative of normal operations;
    - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
    - d. the total duration of any visible emission incident; and
    - e. any corrective actions taken to minimize or eliminate the visible emissions.
  4. The permittee shall collect and record the following information each month:
    - a. The total tons per month of aluminum throughput.
    - b. The annual, year-to-date tons of aluminum throughput (summation of 'a', for each calendar month to date from January to December).
- D. Reporting Requirements**
1. The permittee shall submit quarterly deviation reports that identify each day during which the permittee deviated from the charge restrictions of section B.1 above, and the type and quantity of such charge employed.  
  
The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
  2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
  3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
  4. The permittee shall submit annual deviation (excursion) reports which identify any exceedances in the maximum aluminum throughput of 19,000 tons per year. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- E. Testing Requirements**
1. Compliance with the emission limitations specified in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:  
Emission Limitation:  
3.58 lbs PE / hr  
  
Applicable Compliance Method:  
The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 3.25 tons per hour by the emission factor for PE (1.1 lb PE per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)  
  
If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A - Methods 1-5.  
Emission Limitation:  
3.41 lbs PM10 /hr  
  
Applicable Compliance Method:  
The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 3.25 tons per hour by the emission factor for PM10 (1.05 lb PM10 per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)  
  
If required, the permittee shall demonstrate compliance with the gr/dscf limitation by testing in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.  
Emission Limitation:  
10.45 tons PE /yr  
9.98 tons PM10 /yr  
  
Applicable Compliance Method:  
The emission limitations were established by multiplying the annual aluminum throughput limit of 19,000 tons per year by the appropriate emission factors for PE and PM10 (1.1 lb PE per ton, and 1.05 lb PM10 per ton, of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91) and dividing by 2000 lbs/ton.  
  
Therefore, provided compliance is shown with the aluminum throughput restriction, compliance with the ton per

year PE and PM10 limitations will be assumed.

Emission Limitation:

1.80 lbs NOx /hr

7.88 tons NOx /yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying an emission factor of 0.15 lb NOx/mmBtu derived from STAPPA / ALAPCO Handbook Table 11-1 (05/91), by a maximum heat input of 12 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.

As long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be assumed (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

Emission Limitation:

Visible particulate emissions shall not exceed 5 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with the test method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 0306020051 Emissions Unit ID: P004 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Aluminum Melt Furnace - (Reverberatory Melter 1) 2.25 ton /hr, 9.2 mmBtu/hr - natural gas fired	OAC rule 3745-31-05 (A)(3) (PTI 03-17008 issued November 29, 2005)	2.47 lbs particulate emissions (PE) /hr, 10.5 tons PE /yr  2.36 lbs particulate matter less than 10 microns in size (PM10) /hr, 9.98 tons PM10 /yr  1.38 lbs nitrogen oxides (NOx) /hr, 6.04 tons NOx /yr  Visible PE shall not exceed 5 percent opacity, as a six-minute average.
	OAC 3745-17-07 (A)	See A.2.a
	OAC 3745-17-11 (B)(1)	See A.2.b

**2. Additional Terms and Conditions**

- (a) This facility, including this emission unit, is not subject to the requirements of 40 CFR 63.1500 et seq. (MACT Subpart RRR) per 40 CFR 63.1500(a) because the facility does not melt materials other than clean charge, internal scrap, and customer returns, and because the facility does not operate sweat furnaces, thermal chip dryers, or scrap dryers /delacquering kilns /decoating kilns (all as defined in 40 CFR 63.1503). See also section B.1.  
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

**B. Operational Restrictions**

1. The permittee shall melt only clean charge, internal scrap, and customer returns, as defined in 40 CFR 63.1503, in this emission unit.
 

Clean charge means furnace charge materials including molten aluminum, T-bar, sow, ingot, billet, pig, alloying elements, aluminum scrap (as defined in 40 CFR 63.1503) known by the permittee to be entirely free of paints, coatings, lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 deg C (650 deg F) or higher; aluminum scrap delacquered/decoated at 482 deg C (900 deg F) or higher, and runaround scrap (as defined in 40 CFR 63.1503).

Internal scrap means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

Customer returns means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (i.e., lacquers).
  2. The permittee shall burn only natural gas in this emissions unit.
  3. The maximum aluminum production throughput for this emissions unit shall not exceed 19,000 tons per year.
- C. Monitoring and/or Record Keeping Requirements**
1. For each day during which the permittee deviated from the charge restrictions of section B.1 above, the permittee shall maintain a record of the type and quantity of such charge employed.
  2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
  3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
    - a. the color of the emissions;
    - b. whether the emissions are representative of normal operations;
    - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
    - d. the total duration of any visible emission incident; and
    - e. any corrective actions taken to minimize or eliminate the visible emissions.
  4. The permittee shall collect and record the following information each month:
    - a. The total tons per month of aluminum throughput.
    - b. The annual, year-to-date tons of aluminum throughput (summation of 'a', for each calendar month to date from January to December).
- D. Reporting Requirements**
1. The permittee shall submit quarterly deviation reports that identify each day during which the permittee deviated from the charge restrictions of section B.1 above, and the type and quantity of such charge employed.
 

The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
  2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
  3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
  4. The permittee shall submit annual deviation (excursion) reports which identify any exceedances in the maximum aluminum throughput of 19,000 tons per year. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- E. Testing Requirements**
1. Compliance with the emission limitations specified in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 

Emission Limitation:  
2.47 lbs PE / hr

Applicable Compliance Method:  
The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 2.25 tons per hour by the emission factor for PE (1.1 lb PE per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A - Methods 1-5.

Emission Limitation:

2.36 lbs PM10 /hr

**Applicable Compliance Method:**

The permittee may determine compliance with the limit above by multiplying the maximum process throughput of 2.25 tons per hour by the emission factor for PM10 (1.05 lb PM10 per ton of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91)

If required, the permittee shall demonstrate compliance with the gr/dscf limitation by testing in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

**Emission Limitation:**

10.45 tons PE /yr  
9.98 tons PM10 /yr

**Applicable Compliance Method:**

The emission limitations were established by multiplying the annual aluminum throughput limit of 19,000 tons per year by the appropriate emission factors for PE and PM10 (1.1 lb PE per ton, and 1.05 lb PM10 per ton, of aluminum processed - STAPPA/ALAPCO Handbook Table 11-2, 05/91) and dividing by 2000 lbs/ton.

Therefore, provided compliance is shown with the aluminum throughput restriction, compliance with the ton per year PE and PM10 limitations will be assumed.

**Emission Limitation:**

1.38 lbs NOx /hr  
6.04 tons NOx /yr

**Applicable Compliance Method:**

Compliance with the hourly emission limitation shall be determined by multiplying an emission factor of 0.15 lb NOx/mmBtu derived from STAPPA / ALAPCO Handbook Table 11-1 (05/91), by a maximum heat input of 9.2 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.

As long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be assumed (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

**Emission Limitation:**

Visible particulate emissions shall not exceed 5 percent opacity, as a six-minute average.

**Applicable Compliance Method:**

If required, compliance shall be determined in accordance with the test method and procedures specified in Method 9 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

1. None