State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
PORTAGE COUNTY
Application No: 16-01897
DATE: 2/8/2001

Foundry Systems International
Rodney McDaniels
5159 S. PROSPECT ST.
RAVENNA, OH 44266-9031

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$14400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA ARAQMD WV PA Akron Metro Area Trans Study

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: To be entered upon final issuance**
Terms and Conditions	**Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 16-01897

Application Number:	16-01897
APS Premise Number:	1667070012
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Foundry Systems International
Person to Contact:	Rodney McDaniels
Address:	5159 S. PROSPECT ST. RAVENNA, OH 44266-9031

Location of proposed air contaminant source(s) [emissions unit(s)]:
5159 S. Prospect Road
Ravenna, OH, **Ohio**

Description of proposed emissions unit(s):
Aluminum Foundry for the production of automobile engine parts, consisting of natural gas furnaces, knock out stations, sand handling and Reclamation, sand core and mold making and others.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may

lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional

facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be <u>obtained before</u> the operation of such new

or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
Particulate Matter	81.6
Sulfur Dioxide	24.4
Organic Compounds	91.3
Nitrogen Oxides	17.5
Carbon Monoxide	21.8
Phenol	6.4
Fluoride	0.3

Emissions Unit ID: **F001**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-08(A)
F001 - Eleven floor pouring and cooling operations. Five from furnaces #3 (P901), two from furnace #4 (P904), and four from Furnace #5(P905). Uncontrolled emission unit with fugitive emissions only.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11
	OAC rule 3745-17-07	

Applicable Emissions Limitations/Control Measures
0.61 Lbs./Hr Sulfur Oxides 2.67 Tons/Yr. Sulfur Oxides
1.70 Lbs/Hr Carbon Monoxide 7.45 Ton/Yr. Carbon Monoxide
3.42 Lbs/Hr Organic Compounds 14.98 Ton/Yr. Organic Compounds
0.55 Lbs/Hr Particulates 2.41 Tons/Yr. Particulates
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average from any building opening or roof vent, except as specified by rule.
Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.e)
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
See 2.a below.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

2. Additional Terms and Conditions

2.a This facility is not located in an appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

2.b The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust;

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

2.c For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

2.d Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

1. The permittees shall not pour more than 3,880 pounds of aluminum per hour (16,994 tons per year, max) in this emissions unit.

C. Monitoring and/or record keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

3. The hourly and annual emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

E. Testing Requirements

1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.55 lbs/hr of particulate emissions
2.41 tons/Yr. particulate matter

Applicable Compliance Method:

Multiply the particulate emission factor of 0.29 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

b. Emission Limitation:

0.61 lb/hr of sulfur dioxide
2.67 Tons/Yr sulfur dioxide

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor of 0.31 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

c. Emission Limitation:

1.70 lb/hr of carbon monoxide
7.45 Ton/Yr carbon monoxide

Applicable Compliance Method:

Multiply the carbon monoxide emission factor of 0.88 pounds of carbon monoxide per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This CO emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

d. Emission Limitation:

3.42 lbs/hr organic compounds
14.98 tpy of organic compounds

Applicable Compliance Method:

Multiply the volatile organic compounds emission factor of 1.76 pounds of VOC per ton of aluminum poured by the total amount of aluminum poured in the emissions unit. This OC emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-08(A)
F002 - Pouring and cooling line #1. Six devices with two molds each on a rotating turn table.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11
	OAC rule 3745-17-07	

Applicable Emissions Limitations/Control Measures
0.88 Lbs./Hr Sulfur Oxides 3.85 Tons/Yr. Sulfur Oxides
2.47 Lbs/Hr Carbon Monoxide 10.82 Ton/Yr. Carbon Monoxide
4.98 Lbs/Hr Organic Compounds 21.81 Ton/Yr. Organic Compounds
0.81 Lbs/Hr Particulates 3.56 Tons/Yr. Particulates
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average from any building opening or roof vent, except as specified by rule.
Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.e)
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
See 2.a below.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

2. Additional Terms and Conditions

2.a This facility is not located in an appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

2.b The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust;

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

2.c For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

2.d Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of

OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

The permittees shall not pour more than 3,880 pounds of aluminum per hour (16,994 tons per year, max) in this emissions unit.

C. Monitoring and/or record keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

3. The hourly and annual emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District

(ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

E. Testing Requirements

1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.81 lbs/hr of particulate emissions
   3.56 tons/Yr. particulate matter

   Applicable Compliance Method:

   Multiply the particulate emission factor of 0.29 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

   b. Emission Limitation:

   0.88 lb/hr of sulfur dioxide
   3.85 Tons/Yr sulfur dioxide

   Applicable Compliance Method:

   Multiply the sulfur dioxide emission factor of 0.31 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

   c. Emission Limitation:

2.47 lb/hr of carbon monoxide
10.82 Ton/Yr carbon monoxide

Applicable Compliance Method:

Multiply the carbon monoxide emission factor of 0.88 pounds of carbon monoxide per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This CO emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

d. Emission Limitation:

4.98 lbs/hr organic compounds
21.81 tpy of organic compounds

Applicable Compliance Method:

Multiply the volatile organic compounds emission factor of 1.76 pounds of VOC per ton of aluminum poured by the total amount of aluminum poured in the emissions unit. This OC emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-08(A)
F003 - Pouring and cooling line # 2. Eight devices with two molds each an a rotating turn table.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11
	OAC rule 3745-17-07	

Applicable Emissions
Limitations/Control Measures

0.63 Lbs./Hr Sulfur Oxides
2.78 Tons/Yr. Sulfur Oxides

1.78 Lbs/Hr Carbon Monoxide
7.80 Ton/Yr. Carbon Monoxide

3.58Lbs/Hr Organic Compounds
15.68 Ton/Yr. Organic Compounds

0.58 Lbs/Hr Particulates
2.54 Tons/Yr. Particulates

Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average from any building opening or roof vent, except as specified by rule.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.e)

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

See 2.a below.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

Emissions Unit ID: **F003**

2. Additional Terms and Conditions

2.a This facility is not located in an appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

2.b The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust;

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

2.c For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

2.d Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

The permittees shall not pour more than 3,880 pounds of aluminum per hour (16,994 tons per year, max) in this emissions unit.

C. Monitoring and/or record keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

3. The hourly and annual emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

E. Testing Requirements

1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.58 lbs/hr of particulate emissions
2.54 tons/Yr. particulate matter

Applicable Compliance Method:

Multiply the particulate emission factor of 0.29 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

b. Emission Limitation:

0.63 lb/hr of sulfur dioxide
2.78 Tons/Yr sulfur dioxide

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor of 0.31 pounds of particulate emissions per ton of metal melted by the maximum hourly rate of metal melted. This particulate emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources conducted in 1998.

c. Emission Limitation:

1.78 lb/hr of carbon monoxide

7.80 Ton/Yr carbon monoxide

Applicable Compliance Method:

Multiply the carbon monoxide emission factor of 0.88 pounds of carbon monoxide per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This CO emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

d. Emission Limitation:

3.58 lbs/hr organic compounds
15.68 tpy of organic compounds

Applicable Compliance Method:

Multiply the volatile organic compounds emission factor of 1.76 pounds of VOC per ton of aluminum poured by the total amount of aluminum poured in the emissions unit. This OC emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-17-08(A)
P001 - 4.7 MMBtu/hr. Natural gas fired burn-out oven. This emissions unit is uncontrolled. This emissions unit receives and processes core sand for the entire facility.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11
	OAC rule 3745-17-07	

Applicable Emissions Limitations/Control Measures
0.57 Pounds/Hr Sulfur dioxide 2.48 Tons/Yr. Sulfur dioxide
0.06 Pound/Hr Organic Compounds 0.25 Ton/Yr. Organic Compounds
0.30 Pounds/Hr Particulate Matter 1.31 tons/Yr. Particulate Matter
0.22 pounds per hour phenol 0.72 ton per year phenol
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.
Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.e)
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
See 2.a below.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

Emissions Unit ID: **P001**

2. Additional Terms and Conditions

2.a This facility is not located in an appendix A area, therefore paragraph B of OAC rule 3745-17-08 does not apply. However, as a condition of Best Available Technology, the Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

2.b The permittee shall minimize or eliminate visible particulate emissions of fugitive dust by employing best available control measures. These measures shall include, but not be limited to, the following:

i. The installation and use of hoods, fans and other equipment to adequately enclose, contain, capture and vent the fugitive dust;

ii. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance, as described below. Ohio EPA may require additional control measures at any or all operations described above if deemed necessary based on observed visible emissions.

2.c For each operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented at all times during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements, such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

2.d Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, SO_2, phenol, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
$S0_2$	Method 5 of 40 CFR Part 60, Appendix A
Phenol	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior

approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.30 lbs/hr of particulate emissions
1.31 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results and multiplying them by the number hours the emissions unit operated during the year.

b. Emission Limitation:

0.57 lbs/hr of sulfur dioxide
2.48 Tons/Yr sulfur dioxide

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year SO_2 emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results and multiplying them by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.22 lb/hr of Phenol

0.72 tons/Yr. of Phenol

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 18, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year phenol emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results and multiplying them by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.06 lb/hr of organic compounds
0.25 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year phenol emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A test results and multiplying them by the number hours the emissions unit operated during the year.

e. Emission Limitation:

5 % opacity as a 3-minute average of fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary

because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-07(A)(1)
P901 - Natural gas fired Aluminum Revererator Furnace, 4-2.5 MMBtu/hr heat input capacity burners and 2.0 tons per hour melt capacity. known as Furnace # 3 (ARF# 3). This emissions unit is not controlled, and has both fugitive and stack emissions. The emissions from this emissions unit are believed to be split 50/50 between fugitive and stack. This emissions unit feed molten aluminum to 5 floor stations.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions Limitations/Control Measures	
0.54 Pounds/Hr Nitrogen Oxides 2.4 Tons/Yr.. Nitrogen Oxides	
0.04 Pound/Hr Organic Compounds 0.18 Ton/Yr. Organic Compounds	
0.004 Pounds/Hr Fluoride or Hydrogen Fluoride 0.019 Ton/Yr. Fluoride or Hydrogen Fluoride	
0.54 Pounds/Hr Particulate Matter 2.1 tons/Yr. Particulate Matter	
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.	
0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	
See 2.a below.	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

2. The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

3. Chlorine shall not be added for demagging the aluminum.

4. Alloying, if any performed in this emissions unit shall be done employing only clean materials.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

b. Visible emissions in excess of 5 percent opacity

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall report all instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
fluoride or hydrogen luoride	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.48 lbs/hr of particulate emissions
      2.1 tons/Yr. particulate matter

      Applicable Compliance Method:

      Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with

prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

0.54 lbs/hr. of nitrogen oxides
2.4 Tons/Yr. nitrogen oxides

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.04 lb/hr of fluoride, or hydrogen fluoride
0.18 ton/Yr of fluoride, or hydrogen fluoride

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year fluoride, or hydrogen fluoride emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.5 lb/hr of organic compounds

2.2 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-07(A)(1)
P902 - Natural gas fired Aluminum Reverberatory Furnace, 21MMBtu heat input capacity and 4.5 tons per hour melt capacity. known as Furnace # 1. This emissions unit is not controlled, and has both fugitive and stack emissions. The emissions from this emissions unit are believed to be split 50/50 between fugitive and stack. This emissions unit feed molten aluminum to 6 device turntables.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions Limitations/Control Measures	
1.66 Pounds/Hr Nitrogen Oxides 7.3 Tons/Yr.. Nitrogen Oxides	
0.12 Pound/Hr Organic Compounds 0.53 Ton/Yr. Organic Compounds	
0.014 Pounds/Hr Fluoride or Hydrogen Fluoride 0.06 Ton/Yr. Fluoride or Hydrogen Fluoride	
1.46 Pounds/Hr Particulate Matter 6.37 tons/Yr. Particulate Matter	
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.	
0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	
See 2.a below.	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

2. The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

3. Chlorine shall not be added for demagging the aluminum.

4. Alloying, if any performed in this emissions unit shall be done employing only clean materials.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

b. Visible emissions in excess of 5 percent opacity

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall report all instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
fluoride or hydrogen fluoride	Method 18 of 40 CFR Part 60, Appendix A

organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      1.46 lbs/hr of particulate emissions
      6.4 tons/Yr. particulate matter

      Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

1.66 lbs/hr. of nitrogen oxides
7.3 Tons/Yr. nitrogen oxides

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.014 lb/hr of fluoride, or hydrogen fluoride
0.06 ton/Yr of fluoride, or hydrogen fluoride

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year fluoride, or hydrogen fluoride emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.115 lb/hr of organic compounds
0.5 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Emissions Unit ID: **P903**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P903 - Natural gas fired Aluminum Reverberatory Furnace, 21MMBtu heat input capacity and 4.5 tons per hour melt capacity. known as Furnace # 2. This emissions unit is not controlled, and has both fugitive and stack emissions. The emissions from this emissions unit are believed to be split 50/50 between fugitive and stack. This emissions unit feed molten aluminum to 8 device turntables.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1)	OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions Limitations/Control Measures	
1.19 Pounds/Hr Nitrogen Oxides 5.22 Tons/Yr.. Nitrogen Oxides	
0.08 Pound/Hr Organic Compounds 0.36 Ton/Yr. Organic Compounds	
0.010 Pounds/Hr Fluoride or Hydrogen Fluoride 0.044 Ton/Yr. Fluoride or Hydrogen Fluoride	
1.05 Pounds/Hr Particulate Matter 4.6 tons/Yr. Particulate Matter	
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.	
0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	
See 2.a below.	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

2. The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

3. Chlorine shall not be added for demagging the aluminum.

4. Alloying, if any performed in this emissions unit shall be done employing only clean materials.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall report all instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant

Emissions Unit ID: **P903**

	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
fluoride or hydrogen fluoride	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      1.05 lbs/hr of particulate emissions
      4.6 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

1.19 lbs/hr. of nitrogen oxides
5.2 Tons/Yr. nitrogen oxides

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.010 lb/hr of fluoride, or hydrogen fluoride
0.044 ton/Yr of fluoride, or hydrogen fluoride

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year fluoride, or hydrogen fluoride emission limitation shall

be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.083 lb/hr of organic compounds
0.36 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements
P904 - Natural gas fired Aluminum Reverberatory Furnace, 10MMBtu heat input capacity and 2.0 tons per hour melt capacity. known as Furnace # 4. This emissions unit is not controlled, and has both fugitive and stack emissions. The emissions from this emissions unit are believed to be split 50/50 between fugitive and stack. This emissions unit feeds molten aluminum to 2 floor molds.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions
Limitations/Control Measures

0.29 Pounds/Hr Nitrogen Oxides
1.27 Tons/Yr.. Nitrogen Oxides

0.02 Pound/Hr Organic Compounds
0.11 Ton/Yr. Organic Compounds

0.002 Pounds/Hr Fluoride or Hydrogen Fluoride
0.01 Ton/Yr. Fluoride or Hydrogen Fluoride

0.26 Pounds/Hr Particulate Matter
1.13 tons/Yr. Particulate Matter

Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).

The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).

See 2.a below.

The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

2. The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

3. Chlorine shall not be added for demagging the aluminum.

4. Alloying, if any performed in this emissions unit shall be done employing only clean materials.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

b. Visible emissions in excess of 5 percent opacity

c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall report all instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
fluoride or hydrogen fluoride	Method 18 of 40 CFR Part 60, Appendix A

organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.26 lbs/hr of particulate emissions
      1.3 tons/Yr. particulate matter

      Applicable Compliance Method:

      Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1

through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

0.29 lbs/hr. of nitrogen oxides
1.27 Tons/Yr. nitrogen oxides

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.002 lb/hr of fluoride, or hydrogen fluoride
0.01 ton/Yr of fluoride, or hydrogen fluoride

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year fluoride, or hydrogen fluoride emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.02 lb/hr of organic compounds

0.11 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-07(A)(1)
P905 - Natural gas fired Aluminum Reverberatory Furnace, 4 MMBtu heat input capacity and 1.5 tons per hour melt capacity. known as Furnace # 5. This emissions unit is not controlled, and has both fugitive and stack emissions. The emissions from this emissions unit are believed to be split 50/50 between fugitive and stack. This emissions unit feeds molten aluminum to 2 floor molds.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions Limitations/Control Measures	
0.31 Pounds/Hr Nitrogen Oxides 1.27 Tons/Yr.. Nitrogen Oxides	
0.02 Pound/Hr Organic Compounds 0.09 Ton/Yr. Organic Compounds	
0.002 Pounds/Hr Fluoride or Hydrogen Fluoride 0.009 Ton/Yr. Fluoride or Hydrogen Fluoride	
0.27 Pounds/Hr Particulate Matter 1.18 tons/Yr. Particulate Matter	
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.	
0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	
See 2.a below.	
The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).	

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The permittee shall only fire natural gas as fuel in this emissions unit.

2. The aluminum melting furnace shall be charged with clean, ingots, bar stock, dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining. Materials bearing oil, grease, paint, or paper shall not be employed.

3. Chlorine shall not be added for demagging the aluminum.

4. Alloying, if any performed in this emissions unit shall be done employing only clean materials.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall report all instances where any materials other than clean aluminum ingots, bar stock and dry, sawed-off pieces of solid aluminum, aluminum chips and turnings from machining, or clean alloying materials were charged into this emissions unit.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant

	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
fluoride or hydrogen fluoride	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.27 lbs/hr of particulate emissions
      1.18 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

0.31 lbs/hr. of nitrogen oxides
1.34 Tons/Yr. nitrogen oxides

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results by the number hours the emissions unit operated during the year.

c. Emission Limitation:

0.002 lb/hr of fluoride, or hydrogen fluoride
0.01 ton/Yr of fluoride, or hydrogen fluoride

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year fluoride, or hydrogen fluoride emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the

Method 7 test results by the number hours the emissions unit operated during the year.

d. Emission Limitation:

0.02 lb/hr of organic compounds
0.09 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

e. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Emissions Unit ID: **P906**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P906 - 15 Casting and knock out stations. Air hammers removing sand from castings. The emissions are enclosed within cabinets which have an estimated capture efficiency of 95%. The captured emissions are vented to cartridge filters which have a estimated control efficiency of 99% Overall control efficiency 94% This emissions unit feeds molten aluminum to 2 floor molds.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1)	OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions Limitations/Control Measures	
Stack Emissions: 7.15 Pound/Hr Organic Compounds 31.31 Tons/Yr. Organic Compounds 0.96 Pounds/Hr Particulate Matter 4.2 tons/Yr. Particulate Matter Fugitive Emissions: 1.01 Pound/Hr Organic Compounds 4.4 Tons/Yr. Organic Compounds 0.38 Pounds/Hr Particulate Matter 1.6 tons/Yr. Particulate Matter Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule. 0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent). The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3). See 2.a below.	The requirements of this rule are less stringent than the requirements of OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of [XXXX1] inches of water while the emissions unit is in operation.

   Where [XXXX1]= the pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. All particulate emissions captured from this emissions unit shall be vented to the cartridge filters.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

2. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

2. If no visible emissions exceeded 5 percent opacity, and no unusual visible emissions were observed during the reporting period, the permittee shall submit a report which states no visible emissions exceeding 5 percent opacity, and no unusual visible emissions were observed during the reporting period.

3. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no deviations occurred during the period a negative declaration shall be submitted.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.959 lbs/hr of particulate emissions

Emissions Unit ID: **P906**

4.198 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results by the number hours the emissions unit operated during the year.

b. Emission Limitation:

7.15 lb/hr of organic compounds
31.3 tpy of organic compounds

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 25 or 25A, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year organic compound emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 25 or 25A stack test results by the number of hours the emissions unit operated during the year.

c. Emission Limitation:

5% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P907 - Foundry core sand reclamation unit, consisting of the sand reclaimer, conveyors, hoppers, screen vibrator and elevator.	OAC rule 3745-31-05	
		OAC rule 3745-17-07
The emissions are enclosed with an estimated capture efficiency of 95%. The captured emissions are vented to the south bag house which has an estimated control efficiency of 99%		OAC rule 3745-17-08(A)
		OAC rule 3745-17-11
Overall control efficiency 94%		
This emissions unit receives and processes core sand for the entire facility.		

Applicable Emissions Limitations/Control Measures	
	Less stringent than the requirements of OAC rule 3745-31-05, and BAT.
	See 2.a below
2.5 pounds per hour particulates matter. (stack emissions).	
0.11 pounds per hour particulates matter. (fugitive emissions).	Less stringent than the requirements of OAC rule 3745-31-05, and BAT.
11.3 Tons per year Particulate matter Total	
1.78 pounds per hour organic compounds. (1.4 lbs/hr stack, 0.38 lbs/hr fugitive) Includes phenol emissions	
7.79 Tons per year organic compounds. Including phenol emissions.	
1.30 pounds per hour phenol 5.70 Tons per year phenol	
0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).	
Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.	

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of [XXXX1] inches of water while the emissions unit is in operation.

   Where [XXXX1]= the pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. All particulate emissions captured from this emissions unit shall be vented to the fabric filter.

3. The permittee shall only fire natural gas as fuel in this emissions unit.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions escaping from the building containing 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 abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the abnormal visible emissions.

3. If any visible emissions in excess of 5 percent opacity are observed, corrective actions shall be employed to eliminate any visible emissions in excess of 5 percent opacity, these actions shall also be noted in the operations log.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit semiannual written reports which:

   a. Identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and

   b. Visible emissions in excess of 5 percent opacity

   c. describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions, or visible emissions greater than 5 percent opacity.

   These reports shall be submitted to the Akron Regional Air Quality Management District (ARAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period. If no abnormal visible fugitive particulate emissions were observed during the period a negative declaration shall be submitted.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Emissions Unit ID: **P907**

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
NO_X	Method 7 of 40 CFR Part 60, Appendix A
Phenol	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      2.58 lbs/hr of particulate emissions
      11.3 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results and multiplying them by the number hours the emissions unit operated during the year.

b. Emission Limitation:

3.13 lbs/hr of sulfur dioxide
13.72 Tons/Yr sulfur dioxide

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year NOx emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 7 test results and multiplying them by the number hours the emissions unit operated during the year.

c. Emission Limitation:

1.17 lb/hr of Phenol
5.1 tons/Yr. of Phenol

Applicable Compliance Method:

Multiply the fluoride emission factor of 0.005 pound of fluoride per ton of aluminum melted in the furnace by the total amount of aluminum melted in the furnace. This fluoride emission factors was supplied by RMT Inc. Consultants for the permittee and was based on unspecified air testing at similar sources.

d. Emission Limitation:

1.3 lb/hr of organic compounds
5.7 tpy of organic compounds

Applicable Compliance Method:

Multiply the volatile organic compounds emission factor obtained during the emission test in pounds of VOC per ton of sand processed in the emissions unit by the total amount of sand recovered.

e. Emission Limitation:

5 % opacity as a 3-minute average of fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

f. Emission Limitation:

no visible particulate emissions from the control device exhaust stack

Applicable Compliance Method:

OAC rule 3745-17-03(B)(4)

F. Miscellaneous Requirements

1. The permit to install for this emissions unit (P907) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: phenol

TLV (mg/m3): 19.245

Maximum Hourly Emission Rate (lbs/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 36.26

MAGLC (ug/m3): 458.2

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements
P908 - Sand break down line, consisting of five belt conveyors, elevators a surge hopper, three vibra mills, and two sixty ton silos. The emissions are enclosed with an estimated capture efficiency of 90%. The captured emissions are vented to the north bag house which has an estimated control efficiency of 99% Overall control efficiency 89% This emissions unit receives and processes sand from the knock out stations.	OAC rule 3745-31-05 OAC rule 3745-17-07 OAC rule 3745-17-08(A) OAC rule 3745-17-11

Applicable Emissions
Limitations/Control Measures

1.6 pounds per hour particulates matter. (total fugitive and stack).

7.1 Tons per year Particulate matter

0.01 grain per dry standard cubic foot of exhaust gas or no visible particulate emissions from the control device stack exhaust stack, (whichever is less stringent).

Visible particulate emissions of fugitive dust shall not exceed five percent opacity, as a three-minute average, except as specified by rule.

Less stringent than the requirements of OAC rule 3745-31-05, and BAT.

See 2.a below

Less stringent than the requirements of OAC rule 3745-31-05, and BAT.

2. Additional Terms and Conditions

2.a The Permittee shall employ control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of [XXXX1] inches of water while the emissions unit is in operation.

   Where [XXXX1]= the pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. All particulate emissions captured from this emissions unit shall be vented to the fabric filter.

3. The permittee shall only fire natural gas as fuel in this emissions unit.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      2.58 lbs/hr of particulate emissions
      11.3 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results and multiplying them by the number hours the emissions unit operated during the year.

b. Emission Limitation:

5 % opacity as a 3-minute average of fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

c. Emission Limitation:

no visible particulate emissions from the control device exhaust stack

Applicable Compliance Method:

OAC rule 3745-17-03(B)(4)

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	This emissions unit produces cores for the entire facility.	Applicable Rules/Requirements
P909 - Core making operations, using sand and Isoset with a SO2 reactant. Consisting of a day silo, heater/cooler, elevators, ten hoppers, 10 core machines, mixers and conveyors.		OAC rule 3745-31-05
The particulate emissions are enclosed with an estimated capture efficiency of 99%. The captured emissions are vented to the south bag house which has an estimated control efficiency of 99%		
Overall control efficiency 98%		
The SO_2 emissions are enclosed by the core machines with an estimated capture efficiency of 99%. The captured emissions are vented to a SO_2 scrubber which has an estimated control efficiency of 99.9%		OAC rule 3745-17-07 OAC rule 3745-17-08(A) OAC rule 3745-17-11
Overall control efficiency 99%		OAC Rule 3745-21-07(G)

Applicable Emissions Limitations/Control Measures
6.7 pounds per hour particulates matter. (total fugitive and stack).
29.4 Tons per year Particulate matter
1.18 pounds per hour organic compounds. (1.17 lbs/hr stack, 0.12 lbs/hr fugitive)
5.16 Tons per year organic compounds.
0.22 pounds per hour SO_2 (0.214 lbs/hr stack)
0.96 Tons per year S0x.
Less stringent than the requirements of OAC rule 3745-31-05, and BAT.
See A.2.a below.
Less stringent than the requirements of OAC rule 3745-31-05, and BAT.
Except per OAC rule 3745-21-07(G)(9)(h), see the requirements of BAT and OAC rule 3745-31-05.

2. Additional Terms and Conditions

2.a The Permittee shall employ best available technology that is sufficient to minimize or eliminate visible emissions of fugitive dust.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of [XXXX1] inches of water while the emissions unit is in operation.

   Where [XXXX1]= the pressure drop established during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. All particulate emissions captured from this emissions unit shall be vented to the fabric filter.

3. The permittee shall only fire natural gas as fuel in this emissions unit.

4. The permittee shall use best engineering practices available to ensure the majority of SO_2 emissions are captured and vented to a a SO_2 Scrubber with 98% control efficiency.

5. The pH of the scrubber liquor shall be maintained within the range of 6.0-10.5.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information each day:

   a. The pH of the scrubber liquor, on a per shift basis.

   b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

3. The permittee shall submit semiannual written reports which (a) identify all days during which any of the above mentioned excursions occurred, (b) describe any corrective actions taken to eliminate the abnormal condition. These reports shall be submitted to the Akron Regional Air Quality Management District by January 31 and July 31 of each year and shall cover the previous 6-month period. If no deviation/excursion has occurred in a reporting period a negative declaration shall be submitted by the appropriate date.

E. Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

1. The emission testing shall be conducted within 3 months after issuance of the permit.

2. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, NO_X,, fluoride or hydrogen fluoride, and organic compounds.

3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Pollutant	USEPA Approved Test Method
particulates	Method 5 of 40 CFR Part 60, Appendix A
SO_2	Method 6 of 40 CFR Part 60, Appendix A
Phenol	Method 18 of 40 CFR Part 60, Appendix A
organic compounds	Method 25 or 25A of 40 CFR Part 60, Appendix A

If applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. The S0x control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in "OAC rule 3745-21-10" or the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

6. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      6.7 lbs/hr of particulate emissions
      29.4 tons/Yr. particulate matter

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 5, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year particulate emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 5 test results and multiplying them by the number hours the emissions unit operated during the year.

b. Emission Limitation:

0.22 lbs/hr of sulfur dioxide
0.96 Ton/Yr sulfur dioxide

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be obtained by stack testing in accordance with method 7, 40 CFR 60, Appendix A, as required by sections E.1 through E.4 of this permit. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA if necessary.

Compliance with the tons per year SO_2 emission limitation shall be demonstrated by multiplying the average hourly emission rate obtained from the Method 6 test results and multiplying them by the number hours the emissions unit operated during the year.

c. Emission Limitation:

1.2 lb/hr of organic compounds
5.3 tpy of organic compounds

Applicable Compliance Method:

Multiply the volatile organic compounds emission factor obtained during the emission test in pounds of VOC per ton of sand processed in the emissions unit by the total amount of sand recovered.

d. Emission Limitation:

5 % opacity as a 3-minute average of fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

e. Emission Limitation:

no visible particulate emissions from the control device exhaust stack

Applicable Compliance Method:

OAC rule 3745-17-03(B)(4)

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Emissions Unit ID: **P910**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P910 - Sand blast operation in an enclosed cabinet.	OAC rule 3745-31-05	2.8 tons particulate matter per year. 0.64 pounds fugitive particulate matter per hour. No Visible emissions from the enclosure or the cartridge filter.
	OAC rule 3745-17-08(A)	See A.2.a below.
	OAC rule 3745-17-11	Less Stringent than the requirements of OAC 3745-31-05 and BAT.

2. Additional Terms and Conditions

2.a The Permittee shall employ best available technology that is sufficient to minimize or eliminate visible emissions of fugitive dust

B. Operational Restrictions

1. This emission unit shall only be operated with the enclosure closed, and the cartridge filters(s) in place.

2. The blasting media used in this emissions unit, shall be a none silica based material.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform Daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions escaping from 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 total duration of the visible emission incident; and
   b. any corrective actions taken to eliminate the abnormal visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed escaping from the containment of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Akron Regional Air Quality Management District 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 limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

   a Emission Limitation:

   0.64 pounds fugitive particulate matter per hour, and
   2.8 tons particulate matter per year.

   Applicable Compliance Method:

   The particulate emission rate (PE) shall be determined by using the following equation except as otherwise provided below:

   Lbs PE/hr = (A) x (B) x (1 - C) + (A) x (B) x(C) x (1-D)

where:
A = particulate emission factor of 15.5 pounds per ton of iron castings throughput, from Bernard S. Gutow Article, Modern Castings, January 1972;
B = hourly media usage rate, tons of sand media; and
c = percent capture efficiency use 99% (supplied by RMT consultants unless actual efficiency is available from stack test data.
D = control efficiency of fabric filter (use 99% control), except if actual efficiency is available from stack test data)

b. Emission Limitation:

No Visible emission

Applicable Compliance Method:

Compliance with OAC rule 3745-17-07(A)(1) shall be determined by the method outlined in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-001-14 EMISSIONS UNIT ID F001

EMISSIONS UNIT DESCRIPTION Pouring and cooling operations from furnaces #3 (P901) and #4 (P904).

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.372 lbs/hr	1.24	0.55 lb/hr	2.41
PM_{10}					
Sulfur Dioxide	attainment	0.402 lbs/hr	1.34	0.61 lb/hr	2.67
Organic Compounds	attainment	2.276 lbs/hr	7.58	3.42 lbs/hr	14.98
Nitrogen Oxides					
Carbon Monoxide	attainment	1.13 lbs/hr	3.77	1.7 lbs/hr	7.45
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
compliance with the terms and conditions of this permit, and the use of only clean dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-001-14 EMISSIONS UNIT ID F002

EMISSIONS UNIT DESCRIPTION Pouring and cooling line #1. Six devices with two molds each on a rotating turn table.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.51 lbs/hr	1.70	0.813 lbs/hr	3.56
PM_{10}					
Sulfur Dioxide	attainment	0.553 lbs/hr	1.78	0.88 lbs/hr	3.85
Organic Compounds	attainment	3.12 lbs/hr	10.41	5.82 lbs/hr	21.79
Nitrogen Oxides					
Carbon Monoxide	attainment	1.551 lbs/hr	4.99	2.45 lbs/hr	10.83
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance withe the terms and conditions of this permit, and the use of only clean dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Pouring and cooling line # 2. Eight devices with two molds each an a rotating turn table.

DATE INSTALLED 3-04-004-14

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.365 lbs./hr.	1.22	0.58 lbs./hr.	2.56
PM_{10}					
Sulfur Dioxide	attainment	0.396 lbs./hr.	1.32	0.63 lbs./hr.	2.77
Organic Compounds	attainment	2.24 lbs./hr.	7.47	3.58 lbs./hr.	15.68
Nitrogen Oxides					
Carbon Monoxide	attainment	1.11 lbs./hr.	3.71	1.78 lbs./hr.	7.79
Lead					
Other: Air Toxics				0.06 lbs./hr.	0.26

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance withe the terms and conditions of this permit, and the use of clean, dry aluminum stock only.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES _____ NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-001-09 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 4.7 MMBtu/hr. Natural gas fired burn-out oven.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.258 lbs./hr	0.86	0.299 lbs./hr	1.31
PM_{10}					
Sulfur Dioxide	attainment	0.489 lbs./hr	1.63	0.566 lbs./hr	2.48
Organic Compounds	attainment	0.049 lbs./hr	0.16	0.057 lbs./hr	0.247
Nitrogen Oxides					
Carbon Monoxide	attainment	0.305 lbs./hr	1.02	0.353 lbs./hr	1.55
Lead					
Other: Air Toxics	Phenol	0.187 lbs./hr	0.62	0.216 lbs./hr	0.72

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SC
PTI Num
FACILIT

Emissions Unit ID: **P910**

FACILITY DESCRIPTION Aluminum Foundry for the production of automobile engine parts, consisting of natural gas furnaces, knock out stations, sand handling and Reclamation, sand core and mold making and others.

CITY/TWP Ravenna, OH

SIC CODE 3365 SCC CODE 3-04-002-14 EMISSIONS UNIT ID P901

EMISSIONS UNIT DESCRIPTION Natural gas fired Aluminum Revererator Furnace, 2.5 MMBtu/hr heat input capacity and 2.0 tons per hour melt capacity. known as Furnace # 3.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.299 lbs./hr	0.99	0.54 lbs./hr	2.1
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	0.024 lbs./hr	0.79	0.04 lbs./hr	0.18
Nitrogen Oxides	attainment	0.341 lbs./hr	1.14	0.54 lbs./hr	2.4
Carbon Monoxide					
Lead					
Other: Air Toxics	Hydrogen Fluoride			0.004	0.019

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with the terms and conditions of this permit and the use of only clean, dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-002-14 EMISSIONS UNIT ID P902

EMISSIONS UNIT DESCRIPTION Natural gas fired Aluminum Revererator Furnace, 21MMBtu heat input capacity and 4.5 tons per hour melt capacity. known as Furnace # 1.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	00.91 lbs./hr.	3.04	1.46 lbs./hr.	6.37
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	0.072 lbs./hr.	0.24	0.12 lbs./hr.	0.53
Nitrogen Oxides	attainment	1.04 lbs./hr.	3.47	1.66 lbs./hr.	7.3
Carbon Monoxide					
Lead					
Other: Air Toxics	Hydrogen Fluoride	0.008 lbs./hr.	0.028	0.014 lbs./hr.	0.06

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with the terms and conditions of this permit and the use of only clean, dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-002-14 EMISSIONS UNIT ID P903

EMISSIONS UNIT DESCRIPTION Natural gas fired Aluminum Reverberator Furnace, 21MMBtu heat input capacity and 4.5 tons per hour melt capacity. known as Furnace # 2.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.66 lbs./hr.	2.18	1.05 lbs./hr.	4.6
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	0.05 lbs./hr.	0.17	0.08 lbs./hr.	0.36
Nitrogen Oxides	attainment	0.747 lbs./hr.	2.49	1.19 lbs./hr.	5.22
Carbon Monoxide					
Lead					
Other: Air Toxics	Hydrogen Fluoride	0.006 lbs./hr.	0.02	0.01 lbs./hr.	0.044

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with the terms and conditions of this permit and the use of only clean, dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SC
PTI Num
FACILIT

Emissions Unit ID: **P910**

FACILITY DESCRIPTION Aluminum Foundry for the production of automobile engine parts, consisting of natural gas furnaces, knock out stations, sand handling and Reclamation, sand core and mold making and others.

CITY/TWP Ravenna, OH

SIC CODE 3365 SCC CODE 3-04-002-14 EMISSIONS UNIT ID P904

EMISSIONS UNIT DESCRIPTION Natural gas fired Aluminum Reverberator Furnace, 2.5MMBtu heat input capacity and 2.0 tons per hour melt capacity. known as Furnace # 4.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.196 lbs./hr.	0.65	0.26 lbs./hr.	1.13
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	0.016 lbs./hr.	0.052	0.02 lbs./hr.	0.11
Nitrogen Oxides	attainment	0.22 lbs./hr.	0.75	0.29 lbs./hr.	1.27
Carbon Monoxide					
Lead					
Other: Air Toxics	Hydrogen Fluoride	0.002 lbs./hr.	0.006	0.02 lbs./hr.	0.01

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with the terms and conditions of this permit and the use of only clean, dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-002-14 EMISSIONS UNIT ID P905

EMISSIONS UNIT DESCRIPTION Natural gas fired Aluminum Reverberator Furnace, 4 MMBtu heat input capacity and 1.5 tons per hour melt capacity. known as Furnace # 5.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.20 lbs./hr.	0.65	0.27 lbs./hr.	1.18
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	0.02 lbs./hr.	0.02	0.02 lbs./hr.	0.09
Nitrogen Oxides	attainment	0.223 lbs./hr.	0.75	0.30 lbs./hr.	1.27
Carbon Monoxide					
Lead					
Other: Air Toxics	Hydrogen Fluoride	0.002 lbs./hr.	0.006	0.002 lbs./hr.	0.009

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with the terms and conditions of this permit and the use of only clean, dry aluminum stock.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-003-32 EMISSIONS UNIT ID P906

EMISSIONS UNIT DESCRIPTION 15 Casting and knock out stations

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	1.6 lbs./hr.	5.3	1.96 lbs./hr.	5.8
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	5.04 lbs./hr.	16.8	8.16 lbs./hr.	35.7
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enclosed in cabinets and vented to a baghouse with 99% control efficiency.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-003-50 EMISSIONS UNIT ID P907

EMISSIONS UNIT DESCRIPTION Foundry core sand reclamation unit, consisting of the sand reclaimer, conveyors, hoppers, screen vibrator and elevator

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	1.6 lbs./hr.	5.3	2.6 lbs./hr.	11.3
PM_{10}					
Sulfur Dioxide	attainment	3.1 lbs./hr.	9.5	3.1 lbs./hr.	13.7
Organic Compounds	attainment	2.2 lbs./hr.	6.5	3.1 lbs./hr.	7.8
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	phenol	1.29 lbs./hr.	4.3	1.3 lbs./hr.	5.7

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enclosed in cabinets and vented to a baghouse with 99% control efficiency.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: phenol

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-003-50 EMISSIONS UNIT ID P908

EMISSIONS UNIT DESCRIPTION Sand break down line, consisting of five belt conveyors, elevators, a surge hopper, three vibra mills, and two sixty ton silos.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	1.3 lbs./hr.	4.4	1.6 lbs./hr.	7.1
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enclosed and vented to a baghouse with 99% control efficiency.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES x NO

IDENTIFY THE AIR CONTAMINANTS:

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-04-003-54 EMISSIONS UNIT ID P909

EMISSIONS UNIT DESCRIPTION Core making operations, using sand and Isoset with a SO2 reactant. Consisting of a day silo, heater/cooler, elevators, ten hoppers, 10 core machines, mixers and conveyors.

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	2.9 lbs./hr.	9.6	6.7 lbs./hr.	29.4
PM_{10}					
Sulfur Dioxide	attainment	0.1 lbs./hr.	0.32	0.22 lbs./hr.	0.96
Organic Compounds	attainment	0.5 lbs./hr.	1.7	1.2 lbs./hr.	5.16
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
enclosed and vented to a baghouse and SO2 scrubber

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 16-01897 Facility ID: 1667070012

FACILITY NAME Foundry Systems International

FACILITY DESCRIPTION Aluminum Foundry for the production of CITY/TWP Ravenna, OH

Emissions Unit ID: **P910**

and mold making and others.

SIC CODE 3365 SCC CODE 3-09-002-01 EMISSIONS UNIT ID P910

EMISSIONS UNIT DESCRIPTION Sand blast operation in an enclosed cabinet.

DATE INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.1 lbs./hr	1.3	0.64 lbs./hr.	2.8
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
total enclosure

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

14056.wpd

NEW SC
PTI Num
FACILIT

Emissions Unit ID: **P910** ___

FACILITY DESCRIPTION Aluminum Foundry for the production of automobile engine parts, consisting of natural gas furnaces, knock out stations, sand handling and Reclamation, sand core and mold making and others.

CITY/TWP Ravenna, OH

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to **Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	☐	0000000**c**.wpd	☒	
Modeling form/results	☐	0000000**s**.wpd	☒	☐
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☒	☐
BAT Study	☐	0000000**b.**wpd	☐	☒
Other/misc.	☐	0000000**t**.wpd	☐	☒

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Complete aluminum foundry for manufacturing automotive engine parts, such as intake manifolds engine heads and others. Using clean dry aluminum stock which is melted in one of five Reverberatory furnaces. The molten aluminum is cast in sand or steel molds that have sand cores. The castings are cooled and have the core sand knocked out. The castings are finished in the machine shop and the core sand is recycled. This PTI contains the emission units for all of the above mentioned activities.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

☐ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install **16-01897**

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

and mold making and others.

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:
NONE

Please complete:

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
Particulate Matter	81.6
Sulfur Dioxide	24.4
Organic Compounds	91.3
Nitrogen Oxides	17.5
Carbon Monoxide	21.8
Phenol	6.4
Fluoride	0.3