



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL
SHELBY COUNTY**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 05-08827

DATE: 11/29/2001

Reliable Castings Corp Sidney Div
Darlene Swords
PO Box 829 1521 W Michigan St
Sidney, OH 45365

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

SWDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 11/29/2001
Effective Date: 11/29/2001**

FINAL PERMIT TO INSTALL 05-08827

Application Number: 05-08827
APS Premise Number: 0575010148
Permit Fee: **\$1800**
Name of Facility: Reliable Castings Corp Sidney Div
Person to Contact: Darlene Swords
Address: PO Box 829 1521 W Michigan St
Sidney, OH 45365

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1521 W Michigan St
Sidney, Ohio**

Description of proposed emissions unit(s):
Gas-fired heat treat oven; core knockout area; Auto-line mold sandblast; Hunter line casting breakout; BMM line casting breakout; Goff tumbleblast; Hunter line mold machine.

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

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit 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 cannot meet the requirements of this permit 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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

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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**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM-10	8.3
PM	14.9
NOx	4.4
CO	3.7

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F012 - Hunter Line Casting Breakout	OAC rule 3745-31-05(A)(3)	0.5 lb PE/hr and 2.3 TPY PE
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from building openings shall not exceed 0 percent opacity as a 3-minute average, except as provided by rule
	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
		See term A.2.a

2. Additional Terms and Conditions

- 2.a The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirement:

The collection efficiency shall be 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.

- 2.b The emissions limitation of 0.5 lb/hr and 2.3 TPY of particulate emissions are based upon

potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

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% opacity as a 3-minute average from building openings

Applicable Compliance Method

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

b. Emission Limitation:

0.5 lb PE/hr and 2.3 TPY PE

Applicable Compliance Method:

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP \text{ or } (EF * TP)/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

EF = Emission factor - 1.2 lbs/ton of product (Ohio EPA's Reasonably Available Control Measures for Fugitive Dust Sources Table 2.7-1)

TP = Tons of product (max. = 0.44 tons/hr)

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PTI A

Issued: 11/29/2001

Emissions Unit ID: **F012**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F013 - Core Knockout Area	OAC rule 3745-31-05(A)(3)	0.9 lb PE/hr, 3.8 TPY PE
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from building openings shall not exceed 0 percent opacity as a 3-minute average, except as provided by rule
	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
		See term A.2.a

2. Additional Terms and Conditions

- 2.a The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirement:

The collection efficiency shall be 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.

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Issued

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Emissions Unit ID: F013

- 2.b** The emissions limitation of 0.9 lb/hr and 3.8 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

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% opacity as a 3-minute average from building openings

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

b. Emission Limitation:

0.9 lb PE/hr, 3.8 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP \text{ or } (EF * TP)/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

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Emissions Unit ID: **F013**

EF = Emission factor - 1.2 lbs/ton of product (Ohio EPA's Reasonably Available Control Measures for Fugitive Dust Sources Table 2.7-1)

TP = Tons of product (max. = 0.725 tons/hr)

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PTI A

Issued: 11/29/2001

Emissions Unit ID: **F013**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F014 - BMM Line Casting Breakout	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(B) OAC rule 3745-17-08(B)	0.5 lb PE/hr and 2.3 TPY PE Visible emissions of fugitive dust from building openings shall not exceed 0 percent opacity as a 3-minute average, except as provided by rule The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See term A.2.a

2. Additional Terms and Conditions

- 2.a The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirement:

The collection efficiency shall be 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.

- 2.b** The emissions limitation of 0.5 lb/hr and 2.3 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

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% opacity as a 3-minute average from building openings

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

- b. Emission Limitation:

0.5 lb PE/hr and 2.6 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP \text{ or } (EF * TP)/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

EF = Emission factor - 1.2 lbs/ton of product (Ohio EPA's Reasonably Available Control

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Emissions Unit ID: **F014**

Measures for Fugitive Dust Sources Table 2.7-1)

TP = Tons of product (max. = 0.435 ton/hr)

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PTI A

Issued: 11/29/2001

Emissions Unit ID: **F014**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F015 - Hunter Line Mold Machine	OAC rule 3745-31-05(A)(3)	1.2 lbs PE/hr, 5.1 TPY PE
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from building openings shall not exceed 0 percent opacity as a 3-minute average, except as provided by rule
	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
		See term A.2.a

2. Additional Terms and Conditions

- 2.a The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirement:

The collection efficiency shall be 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.

- 2.b** The emissions limitation of 1.2 lbs/hr and 5.1 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

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% opacity as a 3-minute average from building openings

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

b. Emission Limitation:

1.2 lbs PE/hr, 5.1 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP \text{ or } (EF * TP)/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

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PTI A

Issued: 11/29/2001

Emissions Unit ID: **F015**

EF = Emission factor - 0.04 lb/ton of product (Ohio EPA's Reasonably Available Control Measures for Fugitive Dust Sources Table 2.7-1)

TP = Tons of product (max. = 29.25 tons/hr)

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Emissions Unit ID: F015

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P039 - Goff Tumbleblast No. 1	OAC rule 3745-31-05(A)(3)	0.1 lb PE/hr and 0.2 TPY PE Visible particulate emissions from the baghouse stack shall not exceed 0% opacity as a 6-minute average.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- The emissions limitation of 0.1 lb/hr and 0.2 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

- 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 weekly 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.
2. These reports are due by the date described in Part 1-General Terms and Conditions of this permit under section (A)(1).

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% opacity as a 6-minute average from the baghouse stack

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

- b. Emission Limitation:

0.1 lb PE/hr and 0.2 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP * E \text{ or } (EF * TP)E/2000$$

Where:

PE = Particulate emission in lb/hr or tons/yr (Annual based on 8,760 hours)

EF = Emission factor - 17.0 lbs/ton of metal (AIRS 1990)

TP = Tons of metal (max. = 0.25 tons/hr)

E = Baghouse efficiency - 99% removal efficiency or 0.01 emitted

If required, compliance shall be demonstrated using Method 5, 40 CFR Part 60, Appendix A.

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PTI A

Issued: 11/29/2001

Emissions Unit ID: **P039**

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	Applicable Emissions Limitations/Control Measures
P040 - Badger Tumbleblast Shotblaster	OAC rule 3745-31-05 (A)(3) OAC rule 3745-17-07(A)(1)	0.1 lb PE/hr and 0.2 TPY PE Visible particulate emissions from the baghouse stack shall not exceed 0% opacity as a 6-minute average. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The emissions limitation of 0.1 lb/hr and 0.2 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation

C. Monitoring and/or Recordkeeping Requirements

IssuedEmissions Unit ID: **P040**

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 weekly 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.
2. These reports are due by the date described in Part 1-General Terms and Conditions of this permit under section (A)(1).

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% opacity as a 6-minute average from the baghouse stack

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

- b. Emission Limitation:

0.1 lb PE/hr and 0.2 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP * E \text{ or } (EF * TP)E/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

EF = Emission factor - 17.0 lbs/ton of metal (AIRS 1990)

TP = Tons of metal (max. = 0.25 ton/hr)

E = Baghouse efficiency - 99% removal efficiency or 0.01 emitted

If required, compliance shall be demonstrated using Method 5, 40 CFR Part 60, Appendix A.

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Issued: 11/29/2001

Emissions Unit ID: **P040**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P903 - Auto-Line Reverberatory Furnace No. 1	OAC rule 3745-31-05(A)(3)	0.7 lbs PE/hr, 3.0 TPY PE, 1.0 lbs NO _x /hr, 4.4 TPY NO _x , 0.8 lbs CO/hr, 3.7 TPY CO
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from building openings shall not exceed 0 percent opacity as a 3-minute average, except as provided by rule
		The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05 (A)(3)

2. Additional Terms and Conditions

- 2.a The emissions limitation of 0.7 lbs PE/hr, 3.0 TPY PE, 1.0 lbs NO_x/hr, 4.4 TPY NO_x, 0.8 lbs CO/hr, 3.7 TPY CO are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. Only virgin aluminum ingots or clean scrap shall be melted in this furnace. Aluminum

contaminated with rubber, plastic, paper, rags, oil, grease, or similar smoke-producing material shall not be charged to this furnace.

2. Natural gas shall be the only fuel burned in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

None

D. Reporting Requirements

None

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-
0.7 lbs PE/hr and 3.0 TPY PE

Applicable Compliance Method-

Compliance shall be demonstrated using Method 5, 40 CFR Part 60, Appendix A. In the absence of Ohio EPA requiring such testing, the permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = [(\text{maximum aluminum melting rate in tons per hour}) \times (\text{EF1})] + [(\text{natural gas combustion rate in million cubic feet per hour}) \times (\text{EF2})]$$

where:

E = Particulate matter emissions rate(lbs/hr).

EF1 = Emission Factor, 0.22 lb (Ohio EPA's Reasonably Available Control Measures for Fugitive Dust Sources Table 2.11-1)

EF2 = Emission Factor, 7.6 lbs (AP-42 1.4, date 9/98)

Note: Annual emission limitations are based on max. cu. ft/hr = 9,000 and 8,760 hr/yr.

- b. Emission limitation-
0 % opacity as a 3-minute average

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

- c. Emission Limitation-
1.0 lbs NO_x/hr and 4.4 TPY NO_x

Applicable Compliance Method-

The permittee may calculate actual NO_x emission rates for the unit utilizing the following equation:

$$E = (EF/1,000,000 \text{ cu ft})(\text{maximum cu ft/hr})$$

where:

E= NO_x emission rate (lbs/hr)

EF= Emission Factor, 100 lbs (from AP-42 1.4-2, date 3/98)

Note: emission limitations are based on max. cu. ft/hr = 9,000 and 8,760 hr/yr.

- d. Emission Limitation-
0.8 lbs CO/hr and 3.7 TPY CO

Applicable Compliance Method-

The permittee may calculate actual CO emission rates for the unit utilizing the following equation:

$$E = (EF/1,000,000 \text{ cu ft})(\text{maximum cu ft/hr})$$

where:

E= CO emission rate (lbs/hr)

EF= Emission Factor, 84 lbs (from AP-42 1.4-2, date 3/98)

Note: emission limitations are based on max. cu. ft/hr = 9,000 and 8,760 hr/yr

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Reliab

PTI A

Issued: 11/29/2001

Emissions Unit ID: **P903**

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P904 - Auto-Line Mold Sandblast	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1)	0.6 lb PE/hr, 0.1 TPY PE Visible particulate emissions from the stack shall not exceed 0% opacity as a 6-minute average. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The emissions limitation of 0.6 lb/hr and 0.1 TPY of particulate emissions are based upon potential-to-emit for this emissions unit. Therefore, it is not necessary to establish record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping 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 weekly 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.
2. These reports are due by the date described in Part 1-General Terms and Conditions of this permit under section (A)(1).

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% opacity as a 6-minute average from the baghouse stack

Applicable Compliance Method-

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in OAC rule 3745-17-03.

- b. Emission Limitation:

0.6 lb PE/hr and 0.1 TPY PE

Applicable Compliance Method-

The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$PE = EF * TP * E \text{ or } (EF * TP)E/2000$$

Where:

PE = Particulate emission in lbs/hr or tons/yr (Annual based on 8,760 hours)

EF = Emission factor - 17 lbs/ton of metal (AIRS 1990)

TP = Tons of metal (max. = 0.75 ton/hr)

E = Baghouse efficiency - 99% removed or 0.01 emitted

If required, compliance shall be demonstrated using Method 5, 40 CFR Part 60, Appendix A.

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Reliab

PTI A

Issued: 11/29/2001

Emissions Unit ID: **P904**

F. Miscellaneous Requirements

None

NEW
PTI
FAC

Emissions Unit ID: **P904**

FACILITY DESCRIPTION Gas-fired heat treat oven; core knockout area; Auto-line mold sandblast; Hunter line casting breakout; BMM line casting breakout; Goff tumbleblast; Hunter line mold machine.

CITY/TWP Sidney

SIC CODE 3365

SCC CODE 3-04-003-31

EMISSIONS UNIT ID

F012

EMISSIONS UNIT DESCRIPTION Hunter Line Casting Breakout

DATE INSTALLED 9/86

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		0.5 lb/hr	2.3	0.5 lb/hr	2.3
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?

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:

NEW
PTI
FACI

Emissions Unit ID: **P904**

FACILITY DESCRIPTION Gas-fired heat treat oven; core knockout area; Auto-line mold sandblast; Hunter line casting breakout; BMM line casting breakout; Goff tumbleblast; Hunter line mold machine.

CITY/TWP Sidney

SIC CODE 3365

SCC CODE 3-04-003-31

EMISSIONS UNIT ID

F014

EMISSIONS UNIT DESCRIPTION BMM Line Casting Breakout

DATE INSTALLED 9/86

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		0.5 lb/hr	2.3	0.5	2.3
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?

RACM

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: _____

NEW SOURCE REVIEW FORM B

PTI Number: 05-08827 Facility ID: 0575010148

FACILITY NAME Reliable Castings Corp. Sidney Div.

FACI

Emissions Unit ID: **P904**

casting breakout, DIMM line casting
breakout; Goff tumbleblast; Hunter line
mold machine.

SIC CODE 3365 SCC CODE 3-04-003-19 EMISSIONS UNIT ID F015

EMISSIONS UNIT DESCRIPTION Hunter Line Mold Machine

DATE INSTALLED 9/86

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		5.1 lbs/hr	5.1	5.1	5.1
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?

RACM

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: _____

NEW SOURCE REVIEW FORM B

PTI Number: 05-08827 Facility ID: 0575010148

FACILITY NAME Reliable Castings Corp. Sidney Div.

FACI

Emissions Unit ID: **P904**

casting breakout, DIMM line casting
breakout; Goff tumbleblast; Hunter line
mold machine.

SIC CODE 3365 SCC CODE 3-04-003-40 EMISSIONS UNIT ID P039

EMISSIONS UNIT DESCRIPTION Goff Tumbleblast No. 1

DATE INSTALLED 9/86

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		0.1 lb/hr	0.2	0.1 lb/hr	0.2
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?

RACM, baghouse

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: _____

NEW
PTI F
FACI

Emissions Unit ID: **P904**

FACILITY DESCRIPTION Gas-fired heat treat oven; core knockout area; Auto-line mold sandblast; Hunter line casting breakout; BMM line casting breakout; Goff tumbleblast; Hunter line mold machine.

CITY/TWP Sidney

SIC CODE 3365

SCC CODE 3-04-003-40

EMISSIONS UNIT ID P040

EMISSIONS UNIT DESCRIPTION Badger Tumbleblast Shotblaster

DATE INSTALLED 9/86

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		0.1 lb/hr	.2	0.1 lb/hr	0.2
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?

RACM, baghouse

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: _____

NEW SOURCE REVIEW FORM B

PTI Number: 05-08827 Facility ID: 0575010148

FACILITY NAME Reliable Castings Corp. Sidney Div.

FACI

Emissions Unit ID: **P904**

casting breakout, DIMM line casting
breakout; Goff tumbleblast; Hunter line
mold machine.

SIC CODE 3365 SCC CODE 03-04-0003-40 EMISSIONS UNIT ID P904

EMISSIONS UNIT DESCRIPTION Auto-Line Mold Sandblast

DATE INSTALLED 8/89

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		0.6 lb/hr	0.1	0.6 lb/hr	0.1
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?

RACM

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: