



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
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Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
LAKE COUNTY
Application No: 02-1241**

CERTIFIED MAIL

X	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
X	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: October 27, 1999

Concorde Castings, Inc.
Nobby Boyk
34000 Lakeland Boulevard
Eastlake, OH 44095

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
DAPC, NEDO



FINAL PERMIT TO INSTALL 02-1241

Application Number: 02-1241

APS Premise Number: 0243011312

Permit Fee: **\$1200**

Name of Facility: Concorde Castings, Inc.

Person to Contact: Nobby Boyk

Address: 34000 Lakeland Boulevard
Eastlake, OH 44095

Location of proposed air contaminant source(s) [emissions unit(s)]:
**34000 Lakeland Boulevard
Eastlake, Ohio**

Description of proposed emissions unit(s):
AEROSPACE CASTING FOUNDRY AND ASSOCIATED PROCESSES.

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

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.

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	11.34
HCl	5.7

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>
Cut-off saws and rough grinders with Rotoclone Collector(P001)	OAC rule 3745-31-05(A)(3)	0.26 pound per hour and 1.14 tons per year particulate matter;
	OAC rule 3745-17-07	5% opacity on a 6 minute average;
	OAC rule 3745-17-11	less stringent than BAT

2. **Additional Terms and Conditions**

- 2.a **INTRODUCTION:**

This is a permit to install for turbine blades and vanes casting equipment and includes the following emissions units:

- P001 Cut-off saws and rough grinders with Rotoclone Collector
- P002 Ceramic shell dip room (slurry tanks and tumbling sanders) with Cyclone Collector
- P003 Five abrasive blast cabinets and hand grinding stations with Rotoclone Collector
- P004 Three open Air Melt electric Induction Furnaces; rated at 900 lbs/hr maximum melt rate (fugitive, no stack) and hot topping process
- P005 Grain etching with hydrochloric acid

B. Operational Restrictions

General

1. The permittee shall maintain all hoods and enclosures in good operating condition and assure that the flow rate is adequate for appropriate capture. Additional capture hooding or enclosures shall be installed if required by the Ohio EPA.

2. The collection and containment efficiency of all air pollution capture hoods and enclosures shall be sufficient to minimize or eliminate visible particulate emissions at all points of capture.
3. Air pollution control systems shall be operated with sufficient volumetric flow to minimize or eliminate fugitive emissions at the points of capture to the extent possible with good engineering design.

P001

4. The permittee shall maintain a pressure drop across air plenums during all periods of use in the rotoclone collector in a range of 6.0 to 8.0 inches W.C. (water column).
5. The permittee shall assure through visual operations at regular intervals that water is trickling over the wire plate in the rotoclone collector during all periods of use.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall monitor visually the level of water in the water level control box for the rotoclone collector daily to ensure that water is trickling over the weir plate. The permittee shall keep a log of these results.
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the rotoclone collector 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 rotoclone collector(plenum) on a weekly basis.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports to the Northeast District Office of the Ohio EPA, Division of Air Pollution Control that identify all periods of time, during normal operating procedures and during which the pressure drop across any baghouse did not comply with any allowable range specified in this permit.

E. Testing Requirements

1. Emission Limitation:

0.26 pound per hour particulate matter

Applicable Compliance Method:

Compliance with the particulate matter emission limit above shall be determined in accordance with OAC rule 3745-17-03 and Method 5 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those visible emission limits required by this permit.

2. Emission Limitation:

Visible emissions at stack or any fugitive emissions from this process no more than 5% opacity as a six minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B).

3. Emission Limitation:

1.14 tons PM per year

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly PM limit by 8760 (hrs/yr) and then dividing by 2000 (lbs/ton).

F. Miscellaneous Requirements

None.

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

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>
Ceramic shell dip room (slurry tanks and tumbling sanders) with cyclone collector(P002)	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07 OAC rule 3745-17-11	0.35 pound per hour and 1.53 tons per year particulate matter; 20% opacity on a 6 minute average; less stringent than BAT

B. Operational Restrictions

- Concorde Castings shall use the cyclone collector in the Ceramic Shell Dip Room during all periods of dust generation and ensure that the slide gates are in the correct open position.

C. Monitoring and/or Recordkeeping Requirements

None.

D. Reporting Requirements

None.

E. Testing Requirements

- Emission Limitation:

0.35 pound per hour particulate matter

Applicable Compliance Method:

Compliance with the particulate matter emission limit above shall be determined in accordance with OAC rule 3745-17-03 and Method 5 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

Such testing may be requested at opacity levels less than those visible emission limits required by this permit .

2. Emission Limitation:

Visible emissions at stack or any fugitive emissions from this process no more than 20% opacity on a 6 minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B).

3. Emission Limitation:

1.53 tons of particulate matter per year

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly limit by 8760 (hrs/yr) and then dividing by 2000 (lbs/ton) .

F. Miscellaneous Requirements

None.

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

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>
Five(5) abrasive blast cabinets and hand grinding stations with rotoclone collector(P003)	OAC rule 3745-31-05(A)(3)	0.64 pound per hour and 2.80 tons per year particulate matter
	OAC rule 3745-17-07	5% opacity on a 6 minute average;
	OAC rule 3745-17-11	less stringent than BAT

B. Operational Restrictions

1. The permittee shall maintain a pressure drop across the air plenums during all periods of use in the rotoclone collector in a range of 6.0 to 8.0 inches W.C. (water column).
2. The permittee shall assure that water is trickling over the wire plate in the rotoclone collector during all periods of use.
3. All abrasive blasting shall take place inside enclosed cabinets and all visual fugitive emissions shall be minimized or eliminated.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall monitor visually the level of water in the water level control box for the rotoclone collector to confirm that water is trickling over the weir plate. The permittee shall keep a log of these results.
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the rotoclone collector 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 rotoclone collector on a weekly basis. The permittee shall keep a log of these results.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports to the Northeast District Office of the Ohio EPA, Division of Air Pollution Control that identify all periods of time, during normal operating procedures and during which the pressure drop across the rotoclone collector did not comply with the allowable range specified in this permit.

E. Testing Requirements

1. Emission Limitation:

0.64 pound per hour particulate matter

Applicable Compliance Method:

Compliance with the particulate matter emission limit above, shall be determined in accordance with OAC rule 3745-17-03 and Method 5 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those visible emission limits required by this permit.

2. Emission Limitation:

Visible emissions at stack or any fugitive emissions from this process no more than 5% opacity on a 6 minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B).

3. Emission Limitation:

2.80 tons per year particulate matter

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly limit by 8760 (hrs/yr) and then dividing by 2000 (lbs/ton).

F. Miscellaneous Requirements

None.

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

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>
Three(3) electric induction furnaces 50, 100, and 300 lbs; maximum melt rate of 900 lbs/hr and	OAC rule 3745-31-05(A)(3)	0.01 pound per hour and .04 ton per year particulate matter; 5% opacity on a 6 minute average;
	OAC rule 3745-17-08(B)	no controls
	OAC rule 3745-17-07(B)	less stringent than BAT
hot topping process(P004)	OAC rule 3745-31-05(A)(3)	1.33 pounds per hour and 5.83 tons per year particulate matter; 5% opacity on a 6 minute average;
	OAC rule 3745-17-07(A)	less stringent than BAT
	OAC rule 3745-17-11	less stringent than BAT

B. Operational Restrictions

None.

C. Monitoring and/or Recordkeeping Requirements

None.

D. Reporting Requirements

None.

E. Testing Requirements

1. Emission Limitation:

1.33 pounds per hour particulate matter for the hot topping process

Applicable Compliance Method:

Compliance with the particulate matter emission limit above shall be determined in accordance with OAC rule 3745-17-03 and Method 5 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those visible emission limits required by this permit.

2. Emission Limitation:

0.01 pound per hour for the induction furnaces

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined by multiplying the emission factor of .1 lb of particulate matter per ton of metal processed, found in Table 12.13-2 (Emission Factors for Steel Foundries) (Jan. 1995 revision) of AP-42, by the maximum tons of metal processed in an hour.

3. Emission Limitation:

Visible emissions at stack or any fugitive emissions from this process no more than 5% opacity on a 6 minute average

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B).

4. Emission Limitation:

0.04 ton per year particulate matter for the induction furnaces

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly limit by 8760 (hours/yr) and then dividing by 2000 (lbs/ton).

5. Emission Limitation:

5.83 tons per year particulate matter for the hot topping process

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly limit by 8760 and then dividing by 2000.

F. Miscellaneous Requirements

None.

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

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>
Grain Etching(P005)	OAC rule 3745-31-05(A)(3)	1.3 pounds per hour and 5.7 tons per year hydrochloric acid; Compliance with Air Toxics policy

B. Operational Restrictions

None.

C. Monitoring and/or Recordkeeping Requirements

None.

D. Reporting Requirements

None.

E. Testing Requirements

1. Emission Limitation:

1.3 pounds per hour hydrochloric acid

Concorde Castings, Inc.

PTI Application: **02-1241**

October 27, 1999

Facility ID: **0243011312**

Emissions Unit ID: **P005**

Applicable Compliance Method:

Compliance with the HCl emission limit above shall be determined in accordance with Method 26 of 40 CFR, Part 60, Appendix A. No testing is specifically required but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those visible emission limits required by this permit.

2. Emission Limitation:

5.7 tons per year hydrochloric acid

Applicable Compliance Method:

Compliance with the annual limit shall be determined by multiplying the allowable hourly limit by 8760 (hours/yr) and then dividing by 2000(lbs/ton) .

F. Miscellaneous Requirements

None.