



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive  
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049  
Columbus, OH 43216-1049

Re: Permit to Install  
Stark County  
Application No: 15-1345

CERTIFIED MAIL

RECEIVED

FEB 23 1999

CANTON CITY HEALTH DEPT  
AIR POLLUTION DIVISION

February 18, 1999

PCC AIRFOILS INC  
CHET STROMSKY  
3860 UNION AVENUE S E  
MINERVA, OH 44657

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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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 & Permit Section  
Division of Air Pollution Control

cc: US EPA  
CANTON AIR POLLUTION CONTROL

George V. Voinovich, Governor  
Nancy P. Hollister, Lt. Governor  
Donald R. Schregardus, Director



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## Permit to Install Terms and Conditions

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Application No. 15-1345  
APS Premise No. 1576000096  
Permit Fee: \$1500.00

Name of Facility: PCC AIRFOILS INC

Person to Contact: CHET STROMSKY

Address: 3860 UNION AVENUE S E  
MINERVA, OH 44657

Location of proposed source(s): 3860 UNION AVENUE S E  
MINERVA, OHIO

Description of proposed source(s):  
NATURAL GAS FIRED HMC CAR BOTTOM FURNACE WITH AFTERBURNER.

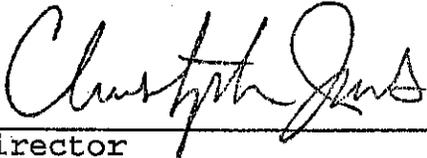
Date of Issuance: February 18, 1999

Effective Date: February 18, 1999

The above named entity is hereby granted a permit to install for the above described source(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 source(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 source(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

  
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Director

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**GENERAL PERMIT CONDITIONS**

**TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

**NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

**CONSTRUCTION OF NEW SOURCES**

The proposed source(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 source(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 Ohio Administrative Code (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.

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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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

Facility Name: **PCC Airfoils Inc**Application Number: **15-1345**Date: **February 18, 1999**AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **PCC Airfoils Inc** located in **Stark County**. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
N005	3.0 MMBtu/ hour natural gas-fired HMC car bottom furnace (used for the burn- out of wax from molds) controlled by a 0.35 MMBtu/hr natural gas- fired primary burner and a 1.0 MMBtu/hour natural gas- fired Afterburner	Compliance with the applicable OAC rules and the terms and conditions of this permit, and the use of an afterburner	3745-17-07  3745-17-09   3745-31-05	BAT is more restrictive  * 0.1 pound PM per 100 pounds of liquid, semi- solid, or solid charge material; 0.61 pound PM/hour; and, 2.7 TPY PM  PM: Compliance with OAC rule 3745- 17-09  ** TOC: 0.1 pound/hour and 0.44 TPY  ** NO <sub>x</sub> : 0.5 pound/hour and 2.2 TPY  ** CO: 0.44 pound/hour and 1.93 TPY  Visible particulate emissions shall

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
N005 Cont'd				not exceed 5 percent opacity exiting the afterburner stack

\* The allowable PM emission rate is for the PM generated by fuel combustion as well as the PM generated by the wax burn-out.

\*\* The allowable emission rate for TOC, NO<sub>x</sub>, and CO are for the combustion of natural gas only.

#### SUMMARY

#### TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate Matter	2.7
TOC	0.44
NO <sub>x</sub>	2.2
CO	1.93

\*Note: The allowable emissions information contained under this Summary section is for informational purposes only and is not enforceable.

#### CONSTRUCTION STATUS

The **Canton Air Pollution Control** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: **N005**.

#### PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing

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the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.
- C. Tests shall be performed for the following source(s) and pollutant(s):

Source

Pollutant(s)

N005

PM

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Canton Air Pollution Control, 420 Market Ave. North, Canton, OH 44702-1544.**

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**MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

**MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Canton Air Pollution Control, 420 Market Ave. North, Canton, OH 44702-1544.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

**AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**A. Operational Restrictions**

1. In addition to the wax burn-out, the permittee shall burn only natural gas, as fuel, in this emissions unit.
2. The average combustion temperature within the afterburner, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
3. The afterburner shall be operated such that a minimum residence time of 1.6 second is maintained at all times during operation. The permittee shall install and operate a flow monitor in order to demonstrate that this residence time is being achieved.
4. The permittee shall operate the afterburner at all times during operation of this emissions unit.

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B. Monitoring and/or Recordkeeping Requirements

- ✓ 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- ✓ 2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the afterburner when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. The permittee shall collect and record the following information for each day:
  - ✓ a. all 3-hour blocks of time during which the average combustion temperature within the afterburner, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance; and,
  - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- ↓ 4. The permittee shall maintain daily records of the necessary parameters (e.g. gas flow rate) which will be needed to demonstrate compliance with the minimum residence time requirement per Condition A.3.
- ↓ 5. The permittee shall perform a quarterly inspection of the afterburner which shall include, but is not limited to, the following check points:
  - a. refractory condition;
  - b. burner condition;
  - c. pressure seals condition;
  - d. shell condition;
  - e. auxiliary fuel piping train; and,
  - f. interlocks, electrically operated valves, shutoff dampers, gauges, continuous recorders, and thermocouples.
- ✓ 6. The permittee shall record notes in a bound log book of the condition(s) for each of the above items and note any

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corrective actions which have been taken to maintain the afterburner in peak operating condition. The recorded entry shall include the name of the person performing the inspection, date and time, identification of the afterburner, and signature of the inspector. It is recommended that the forms contained in Ohio EPA's Operation and Maintenance (O&M) Guidelines for Air Pollution Control Equipment be used as an aid to compiling the information required for this Condition.

**C. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the afterburner does not comply with the temperature limitation specified in Condition A.2. Each report shall be submitted within one week after the deviation has occurred. The report shall contain any corrective actions which were taken to correct the deficiency.
3. The permittee shall submit deviation (excursion) reports that identify each time period during which the residence time within the combustion chamber of the afterburner dropped below the minimum time specified in Condition A.3. Each report shall be submitted within one week after the deviation has occurred. The report shall contain any corrective actions which were taken to correct the deficiency.
4. The permittee shall submit quarterly reports which summarize the inspection and actions taken in accordance with Condition B.4.

**D. Compliance Methods and Emission Testing Requirements**

1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:

a. Emission Limitation

0.1 lb PM per 100 lbs of liquid, semi-solid, or solid charge material

Applicable Compliance Method

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

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b. Emission Limitation

0.61 lb PM/hr

Applicable Compliance Method

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

c. Emission Limitation

0.1 lb TOC/hr

Applicable Compliance Method

Multiply the maximum heat input of 4.35 MMBtu/hr (total combined for furnace, primary burner, and afterburner) by the natural gas AP-42 emission factor (Table 1.4-1) of 8 lbs TOC per MMCF of gas burned, and then divide by 1000 Btu per cubic feet of gas and multiply by 1.1 (safety factor).

d. Emission Limitation

0.5 lb NO<sub>x</sub>/hr

Applicable Compliance Method

Multiply the maximum heat input of 4.35 MMBtu/hr (total combined for furnace, primary burner, and afterburner) by the natural gas AP-42 emission factor (Table 1.4-1) of 100 lbs NO<sub>x</sub> per MMCF of gas burned, and then divide by 1000 Btu per cubic feet of gas and multiply by 1.1 (safety factor).

e. Emission Limitation

0.44 lb CO/hr

Applicable Compliance Method

Multiply the maximum heat input of 4.35 MMBtu/hr (total combined for furnace, primary burner, and afterburner) by the natural gas AP-42 emission factor (Table 1.4-1) of 84 lbs CO per MMCF of gas burned, and then divide by 1000 Btu per cubic feet of gas and multiply by 1.1 (safety factor).

f. Emission Limitation

2.7 TPY PM

0.44 TPY TOC

2.2 TPY NO<sub>x</sub>

1.93 TPY CO

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Applicable Compliance Method

The ton/year limitation was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

g. Visible Emission Limitation

Visible particulate emissions shall not exceed 5 percent opacity exiting the afterburner stack.

Applicable Compliance Method

OAC Rule 3745-17-03

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. the emission testing shall be conducted within 3 months after startup of this emissions unit;
  - b. 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 Canton City Health Department, Air Pollution Control Division; and,
  - c. the emissions testing shall be conducted to demonstrate compliance with the allowable emission rate for particulate matter. The following test method shall be employed to demonstrate compliance with the allowable hourly mass emission rate for particulate matter from 40 CFR Part 60, Appendix A: Methods 5.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton Air Pollution Control. 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 Canton Air Pollution Control's refusal to accept the results of the emission test(s).

Personnel from the Canton Air Pollution Control shall be permitted to witness the test(s), examine the testing

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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 Canton Air Pollution Control within 30 days following completion of the test(s).

E. Miscellaneous Requirements

None.