



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LORAIN COUNTY**

CERTIFIED MAIL

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: 02-17780

DATE: 4/17/2003

PolyOne Corporation
Denny Lugar
Moore and Walker Rds
Avon Lake, OH 44012

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,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 4/17/2003
Effective Date: 4/17/2003**

FINAL PERMIT TO INSTALL 02-17780

Application Number: 02-17780
APS Premise Number: 0247030884
Permit Fee: **\$400**
Name of Facility: PolyOne Corporation
Person to Contact: Denny Lugar
Address: Moore and Walker Rds
Avon Lake, OH 44012

Location of proposed air contaminant source(s) [emissions unit(s)]:
**Moore and Walker Rds
Avon Lake, Ohio**

Description of proposed emissions unit(s):
Boiler replacement (B004).

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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 record keeping 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 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

PolyOne Corporation
PTI Application: 02-17780
Issued: 4/17/2003

Facility ID: 0247030884

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>
NO _x	15.90
CO	44.24
VOC	0.80
PE	3.64
SO ₂	0.24

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.

OAC rule 3745-17-10(B)(1)

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

B007 - 91.78 mmBtu/hr natural gas fired boiler, Boiler No. 8 OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(A)(1)

PolyO**PTI A****Issued: 4/17/2003**Emissions Unit ID: **B007**

Applicable Emissions
Limitations/Control Measures

Nitrogen oxide (NO_x) emissions shall not exceed 3.63 pounds per hour and 15.90 tons per year.

Sulfur dioxide (SO₂) emissions shall not exceed 0.055 pound per hour and 0.24 ton per year.

Carbon monoxide (CO) emissions shall not exceed 10.10 pounds per hour and 44.24 tons per year.

Volatile organic compounds (VOC) emissions shall not exceed 0.18 pound per hour and 0.80 ton per year.

Particulate emissions (PE) shall not exceed 0.83 pound per hour and 3.64 tons per year.

The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart Dc, and OAC rule 3745-17-07(A)(1).

See Section D.2.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

Visible particulate emissions from

any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee 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.

D. 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. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. Actual start-up date (within 15 days after such date); and
- c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency
Northeast District Office
Division of Air Pollution Control
2110 East Aurora Road
Twinsburg, Ohio 44087

E. Testing Requirements

1. Emission Limitation
3.63 lbs/hr, and 15.90 tpy of NO_x emissions

Applicable Compliance Method

Compliance with the 3.63 lbs/hr limitation shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.0396 lb NO_x / MMBtu) by the maximum rated capacity of the emissions unit (91.78 MMBtu/hr).

Compliance with the 15.90 tpy limitation shall be demonstrated by multiplying the hourly NO_x emission rate (3.63 lbs/hr) by the maximum hours of operation (8,760 hrs/yr) for the emissions unit and dividing by 2,000 lbs/ton.

2. Emission Limitation
0.055 lb/hr, and 0.24 tpy of SO₂ emissions

Applicable Compliance Method

Compliance with the 0.055 lb/hr limitation shall be demonstrated by multiplying the AP-42 emission factor for Natural Gas Combustion for Small Boilers, Section 1.4, Table 1.4-2, (0.6 lb/10⁶ scf) by the average natural gas higher heating value (1 scf/1020 Btu), by a conversion factor of (10⁶ Btu/mmBtu) and by maximum rated capacity of the emissions unit (91.78 MMBtu/hr).

Compliance with the 0.24 tpy limitation shall be demonstrated by multiplying the hourly SO₂ emission rate (0.055 lb/hr) by the maximum hours of operation (8,760 hrs/yr) for the emissions

unit and dividing by 2,000 lbs/ton.

3. Emission Limitation
10.10 lbs/hr, and 44.24 tpy of CO emissions

Applicable Compliance Method

Compliance with the 10.10 lbs/hr limitation shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.11 lb CO / MMBtu) by the maximum rated capacity of the emissions unit (91.78 MMBtu/hr).

Compliance with the 44.24 tpy limitation shall be demonstrated by multiplying the hourly CO emission rate (10.10 lbs/hr) by the maximum hours of operation (8,760 hrs/yr) for the emissions unit and dividing by 2,000 lbs/ton.

4. Emission Limitation
0.18 lb/hr, and 0.80 tpy of VOC emissions

Applicable Compliance Method

Compliance with the 0.18 lb/hr limitation shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.002 lb VOC / MMBtu) by the maximum rated capacity of the emissions unit (91.78 MMBtu/hr).

Compliance with the 0.80 tpy limitation shall be demonstrated by multiplying the hourly VOC emission rate (0.18 lb/hr) by the maximum hours of operation (8,760 hrs/yr) for the emissions unit and dividing by 2,000 lbs/ton.

5. Emission Limitation
0.83 lb/hr, and 3.64 tpy of particulate emissions

Applicable Compliance Method

Compliance with the 0.83 lb/hr limitation shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.009 lb PE / MMBtu) by the maximum rated capacity of the emissions unit (91.78 MMBtu/hr).

Compliance with the 3.64 tpy limitation shall be demonstrated by multiplying the hourly particulate emission rate (0.83 lb/hr) by the maximum hours of operation (8,760 hrs/yr) for the emissions unit and dividing by 2,000 lbs/ton.

6. Emission Limitation
20% opacity for visible particulate emissions, as a six-minute average

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PolyO

PTI A

Issued: 4/17/2003

Emissions Unit ID: **B007**

Applicable Compliance Method

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA reference method 9, if required by the Ohio EPA.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 02-17780 Facility ID: 0247030884

FACILITY NAME PolyOne Corporation

FACILITY DESCRIPTION Boiler replacement (B004) CITY/TWP Avon Lake

SIC CODE 3087 SCC CODE 1-02-006-02 EMISSIONS UNIT ID B007

EMISSIONS UNIT DESCRIPTION 91.78 mmBtu/hr natural gas fired boiler, Boiler No. 8

DATE INSTALLED 9/2003

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		0.83 lb/hr	3.64	0.83 lb/hr	3.64
PM ₁₀					
Sulfur Dioxide		0.055 lb/hr	0.24	0.055 lb/hr	0.24
Organic Compounds		0.18 lb/hr	0.80	0.18 lb/hr	0.80
Nitrogen Oxides		3.63 lbs/hr	15.90	3.63 lbs/hr	15.90
Carbon Monoxide		10.10 lbs/hr	44.24	10.10 lbs/hr	44.24
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR 60,

NESHAP?

PSD?

OFFSET POLICY?

Subpart Dc

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

BAT consists of the following emission limitations: PE: 0.83 lb/hr and 3.64 tpy; SO₂: 0.055 lb/hr and 0.24 tpy; OC: 0.18 lb/hr and 0.80 tpy; NO_x: 3.63 lbs/hr and 15.90 tpy; CO: 10.10 lbs/hr and 44.24 tpy.

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 containinants 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: _____