



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
HAMILTON 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: 14-4709

DATE: July 8, 1999

Bayer Corporation
Terry A Harris
356 Three Rivers Parkway
Addyston, OH 45001

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,
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA
HAMILTON COUNTY DEPT. OF ENV SERVICES



**Permit To Install
Terms and
Conditions**

Issue Date: July 8, 1999
Effective Date: July 8, 1999

PERMIT TO INSTALL 14-4709

Application Number: 14-4709
APS Premise Number: 1431010054
Permit Fee: **\$1400**
Name of Facility: Bayer Corporation
Person to Contact: Terry A Harris
Address: 356 Three Rivers Parkway
Addyston, OH 45001

Location of proposed air contaminant source(s) [emissions unit(s)]:
**356 Three Rivers Parkway
Addyston, Ohio**

Description of proposed emissions unit(s):
POLYMERIZATION PROCESS UNIT AND POLYMER COMPOUNDING PROCESS.

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. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule

3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written 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.) See B.14 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
 - i. Compliance certifications shall be submitted on an annual basis unless the applicable requirement specifies more frequent submissions.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

10. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or

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upset provision contained in any applicable requirement.

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11. Title V Permit To Operate Application

Pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit.

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B. State Only Enforceable 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

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lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance

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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. 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.

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14. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. 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>
Organic Compound	13.03
PM	15.17
PM ₁₀	11.15

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
polymerization process unit vented to boilers	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 lbs/hr and 40 lbs/day, unless reduced by at least 85 percent, on any day when photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), are employed.
	40 CFR, Part 63, Subpart JJJ	See terms A.I.2, A.III.1, A.IV.1, A.V.1 and A.VI.1.

. Additional Terms and Conditions

- 2.a The permittee shall comply with all applicable emission limitations and/or control requirements of 40 CFR Part 63, Subpart JJJ.

II. Operational Restrictions

1. Emissions vented to the boiler(s) for percent reduction shall be introduced into the flame zone of such a device.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with all applicable monitoring and recordkeeping requirements specified in 40 CFR Part 63, Subpart JJJ.

IV. Reporting Requirements

1. The permittee shall submit a copy of the Notification of Compliance status report to the Hamilton County Department of Environmental Services within 150 operating days after initial startup. The notification shall contain the information specified in §§63.1335(e)(5)(i)-(viii). The permittee shall also comply with all other reporting requirements of this subpart.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for emissions unit P021 in accordance with the following requirements:
 - a. The emission testing shall be conducted to demonstrate compliance with the limitations and or control efficiencies of OAC rule 3745-21-07(G) and 40 CFR Part 63, Subpart JJJ.
 - 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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s).

VI. Miscellaneous Requirements

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Emissions Unit ID: **P021**

1. The permittee shall comply with all applicable miscellaneous requirements of 40 CFR, Part 63, Subpart JJJ.
2. The Terms and Conditions of Permit to Install 14-4709 shall supersede the Terms and Conditions of Permit to Install 14-4668 for emissions units P021 and P029.

B. State Only Enforceable Section

I. 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>
polymerization process unit vented to boilers	OAC rule 3745-31-05	0.35 lb OC/hr, 8.4 lbs OC/day, 1.6 tons OC/yr.

2. Additional Terms and Conditions

- 2.a Compliance with OAC rule 3745-31-05 shall be demonstrated by emissions from specified process vents discharged to a boiler with at least a 99.99% control efficiency and compliance with 40 CFR, Part 63, Subpart JJJ.

II. Operational Restrictions

1. All non-insignificant process vents from emissions unit P021, except transfer to holding tanks, shall be vented to a boiler for incineration, with a control efficiency of at least 99.99%.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B.I. of these terms and conditions shall be determined in accordance with the following method(s):

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Emissions Unit ID: **P021**

Emission Limitation:

0.35 lb OC/hr, 8.4 lbs OC/day, 1.6 tons OC/yr.

Applicable Compliance Method:

Compliance with the emission limitations outlined in Section B.I. shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4668 submitted November 10, 1998.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]

A. State and Federally Enforceable Section

I. 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>
plastic polymer compounding and extrusion process	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed twenty percent (20%) opacity, as a three minute average, except as specified by rule.
	OAC rule 3745-17-11	22.27 lbs particulate emissions/hr (Less stringent than the limit established by OAC rule 3745-31-05).

. Additional Terms and Conditions

2.a Particulate and volatile organic compound emissions from the extruder associated with emissions unit P029 shall be captured and vented to a venturi scrubber having a particulate control efficiency of at least 95%. Volatile organic compound emissions from the venturi scrubber shall be directed to a thermal oxidizer having a control efficiency of at least 95%, except during the allowable scrubber atmospheric venting period. Emissions unit P029 shall not vent to the atmosphere from the scrubber for more than 720 hours per calendar year.

II. Operational Restrictions

1. The pressure drop across the venturi scrubber for emissions unit P029 shall be continuously maintained within the range of 20 to 35 inches of water at all times while emissions unit P029 is in operation.

Emissions Unit ID: P029

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 110 gallons per minute at all times while the emissions unit P029 is in operation.
3. The thermal oxidizer's combustion chamber temperature shall not be less than 850 degrees Fahrenheit at any time when organic emissions from emissions unit P029 are being vented to the thermal oxidizer.
4. Emissions unit P029 shall process only pellets through the uncontrolled intermediate polymer silos.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to measure the static pressure drop across the scrubber and the scrubber water flow rate while emissions unit P029 is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The pressure drop across the scrubber, in inches of water, on a once per shift basis.
 - b. The scrubber water flow rate, in gallons per minute, on a once per shift basis.
 - c. The operating times for the capture (collection) system, venturi scrubber, monitoring equipment, and the associated emissions units.
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion chamber temperature within the thermal oxidizer serving emissions unit P029. Units shall be in degrees Fahrenheit. The monitoring and control 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.

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

- a. All time during which the combustion chamber temperature within the thermal oxidizer, when the emissions unit was in operation, was below 850 degrees Fahrenheit.
 - b. The operating times for the capture (collection) system, thermal oxidizer and the associated emissions units.
3. The permittee shall maintain records that include the following information for each period during which organic compound emissions from emissions unit P029 are vented to the atmosphere from the scrubber during scheduled maintenance shutdown:

- a. The date of the thermal oxidizer control device shutdown.
 - b. The time interval over which the thermal oxidizer control device shutdown occurred.
4. The permittee shall visually inspect each of the control devices which are required to control particulate emissions from emissions unit P029 for visible holes or tears, bag leaks, and excessive dusting or visible emissions on a daily basis. Corrective actions shall be initiated if any of the above control device malfunctions are detected.

The permittee shall maintain daily records of the date, time, and the results of the visual inspections. The date, time, and description of any corrective actions taken to remedy control device malfunctions shall also be recorded.

IV. Reporting Requirements

1. The permittee shall submit deviation reports which provide the following information for each time the thermal oxidizer combustion chamber temperature falls below 850 degrees Fahrenheit when emissions unit P029 is being vented to the thermal oxidizer, all periods of time during which the static pressure drop across the scrubber and the scrubber water flow rate were not maintained at or above the required levels and each time that any visible inspections detected a control device malfunction:
 - a. The date of the excursion or malfunction.
 - b. The time interval over which the excursion or malfunction occurred.
 - c. The temperature values of the thermal oxidizer, pressure drop across the scrubber and scrubber water flow rate during the excursion.
 - d. The cause(s) for the excursion or malfunction.
 - e. The corrective action which has been or will be taken to prevent similar excursions or malfunctions in the future.
2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any scheduled major maintenance requiring the shutdown of the thermal oxidizer control device and the scheduled shutdown duration two (2) weeks prior to the shutdown.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity from stack

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Applicable Compliance Method:

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

2. Emission Limitation:

20% opacity for fugitive dust

Applicable Compliance Method:

Compliance with OAC rule 3745-17-07(B)(1) shall be determined using the methods outlined in OAC rule 3745-17-03(B)(3).

3. Emission Limitation:

22.27 lbs particulate emissions/hr

Applicable Compliance Method:

Compliance with the emission limitations outlined in Section A.I. shall be tracked by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4668 submitted November 10, 1998.

If testing is required to demonstrate compliance with the allowable emission limitation from OAC rule 3745-17-11, then testing shall be conducted using the following method: for particulates, Method 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The Terms and Conditions of Permit to Install 14-4709 shall supersede the Terms and Conditions of Permit to Install 14-4668 for emissions units P021 and P029.

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B. State Only Enforceable Section**I. 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>
plastic polymer compounding and extrusion process	OAC rule 3745-31-05	20.38 lbs OC/hr, 11.43 tons OC/yr. 3.47 lbs/hr particulate emissions/hr, 15.17 tons particulate emissions/yr, 2.54 lbs PM-10/hr, 11.15 tons PM-10/yr.* * (These emission limits represent the combined particulate emissions for emissions units P027 through P034.)

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

- The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

- a. Background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.).
- b. A copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None.

V. Testing Requirements

1. Emission Limitation:

20.38 lbs OC/hr, 11.43 tons OC/yr, 3.47 lbs/hr particulate emissions/hr, 15.17 tons particulate emissions/yr, 2.54 lbs PM-10/hr, 11.15 tons PM-10/yr

Applicable Compliance Method:

Compliance with the emission limitations outlined in Section B.I. shall be tracked by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4668 submitted November 10, 1998.

If testing is required to demonstrate compliance with the allowable emission limitation of 20.38 lbs OC/hr, 11.43 tons OC/yr, 3.47 lbs/hr particulate emissions/hr, 15.17 tons particulate emissions/yr, 2.54 lbs PM-10/hr, 11.15 tons PM-10/yr, then testing shall be conducted using the following method: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for OC, Method 25 of 40 CFR, Part 60, Appendix A; for PM-10, Method 201 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. This permit allows the use of the materials specified by the permittee in the PTI 14-4668. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the organic compound emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the emission data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the SCREEN 3.0 model and a comparison of the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground Level Concentration (MAGLC).

The following summarizes the results of the modeling for each pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 14.3

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 202
MAGLC (ug/m3): 2024

Pollutant: Acrylonitrile

TLV (ug/m3): 4300

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30

MAGLC (ug/m3): 102

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains

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documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.