



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
DARKE COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 08-04175

DATE: 11/12/2002

BASF Corp
Michael Murphy
1175 Martin St
Greenville, OH 45331-0000

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 11/12/2002
Effective Date: 11/12/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 08-04175

Application Number: 08-04175
APS Premise Number: 0819070134
Permit Fee: **\$200**
Name of Facility: BASF Corp
Person to Contact: Michael Murphy
Address: 1175 Martin St
Greenville, OH 45331-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1175 Martin St
Greenville, Ohio**

Description of proposed emissions unit(s):
Increase NOx lb/mmBtu for B010 in accordance with stack testing results; Clarify in B007 that it is sometimes used as an alternate air emission control device.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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 of federally enforceable 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 made to the appropriate Ohio EPA District Office or local air agency. 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. See B.10 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. 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 shall be submitted pursuant to 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 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.

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 ORC section 3704.08.
 - 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.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit 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. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

11. 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.

12. 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.

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 of state-only enforceable 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 state-only required 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. 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.

4. 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.

5. 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.

6. 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.

7. 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).

8. 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.

9. 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>
<u>Particulates</u>	<u>2.78</u>
<u>SO2</u>	<u>4.54</u>
<u>NOx</u>	<u>22.4</u>
<u>CO</u>	<u>12.85</u>
<u>OC</u>	<u>0.94</u>

BASF Corp

Facility ID: 0819070134

PTI Application: 08-04175

Modification Issued: 11/12/2002

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>
B007 - 60.3 mmBtu/hr natural gas/fuel oil fired boiler, B-803A; *Modification	OAC rule 3745-31-05 (A)(3)	2.6 particulate emissions (PE) TPY; 0.05 lb/mmBtu sulfur dioxide (SO ₂), 4.40 TPY SO ₂ ; 0.08 lb/mmBtu carbon monoxide (CO), 10.42 TPY CO; 0.005 lb/mmBtu organic compounds (OC), 0.68 TPY OC 5% visible emission opacity, as a 6-minute average except during periods of startup and shutdown The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10 (B)(1) and 3745-31-05 (D).
	OAC rule 3745-31-05 (D) Synthetic Minor Restrictions	0.14 lb/mmBtu nitrogen oxides (NO _x), 12.40 TPY NO _x , as a rolling, 12-month summation;
	OAC rule 3745-17-10 (B)(1)	0.020 lb particulate emissions/mmBtu actual heat input
	OAC rule 3745-17-07 (A)(1)OAC rule 3745-18-06 (D) 40 CFR Part 60 Subpart Dc	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

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BASF

PTI A₁

Modification Issued: 11/12/2002

Emissions Unit ID: B007

2. Additional Terms and Conditions

- 2.a** The emissions unit B007 is identified as an alternative organic compound emission control device to the Resin Thermal Oxidizer No. 2. When it is functioning as an organic compound emission control device, B007 shall be operated such that it meets a minimum destruction efficiency of 98%.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or No. 2 distillate fuel oil in this emissions unit. However, during times when this emissions unit is functioning as an organic compound emission control device, as described in section A.I.2.a., these fuels may be supplemented with organic compound vapors.
2. When burning fuel oil in this emissions unit, the permittee shall only use distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils"). The sulfur content of the distillate oil shall not exceed 0.05 percent sulfur by weight.

If neither natural gas or distillate fuel oil with a 0.05 percent sulfur content are available, then the permittee shall shut down the emissions unit B007 until such time that one or the other fuel is available.

3. The maximum natural gas usage in this emissions unit shall not exceed 248 million cubic feet/year, as a rolling 12-month summation.

In the event, the permittee substitutes the use of natural gas with fuel oil, then the following calculation shall be used to determine how much fuel oil can be substituted, in order to maintain compliance with the nitrogen oxide allowable emission limitation of 12.4 TPY, as a rolling 12-month summation:

$$[(20 \text{ lbs NO}_x/1000 \text{ gals oil})(F) + 100 \text{ lbs NO}_x/\text{mmscf})(G)] < 12.4 \text{ TPY NO}_x, \text{ as a rolling 12-month 2000 lbs/ton summation}$$

Where:

F = amount of distillate fuel oil burned, in gallons per year

G = amount of natural gas burned, in million cubic feet per year

III. Monitoring and/or Recordkeeping Requirements

1. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier. When a shipment of oil is received with a sulfur content higher than 0.05 percent by weight, the permittee shall maintain monthly records of the calculated sulfur content based upon a volume-weighted average of the calculated sulfur content for all shipments of oil, for only those months when oil is combusted in this emissions unit.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

2. The permittee shall maintain monthly records of the following information:
 - a. The total amount of fuel burned in this emissions unit, in cubic feet of natural gas; and in gallons of distillate fuel oil.
 - b. The rolling, 12-month summation of natural gas, in cubic feet and distillate fuel oil, in gallons.
 - c. The calculated emission rate of nitrogen oxides, in tons.
 - d. The rolling, 12-month summation of the nitrogen oxides emission rates, in tons.

Given that the permittee has been required to maintain monthly records of fuel usage by way of PTI 08-2256 issued April 1, 1992, compliance with the annual fuel usage limitation expressed in this permit through rolling, 12-month summations, shall begin immediately upon issuance of this permit.

3. For each day during which the permittee burns a fuel other than natural gas, No. 2 distillate fuel oil, and/or is supplemented with organic vapors (when this unit is operating as a control device), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of:
 - a. the 0.05 percent sulfur content limitation of the fuel;
 - b. each day when a fuel other than natural gas, No. 2 distillate fuel oil and/or organic vapors (when this unit is operating as a control device) was burned in this emissions unit;
 - c. the rolling, 12-month natural gas usage limitation; and
 - d. the rolling, 12-month NO_x emission limitation.

Modification Issued: 11/12/2002

2. The permittee shall submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. All of the reports shall be submitted in accordance with section A.1.c. of the General Terms and Conditions.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation-

0.020 lb particulate emissions/mmBtu actual heat input

Applicable Compliance Method-

For the use of natural gas, compliance shall be based upon multiplying the hourly gas burning capacity of the emissions unit (57,428.6 cu.ft/hr) by the emission factor of 1.9 lbs filterable particulate emissions/mmscf given for natural gas in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). For the use of distillate fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (431 gals/hr) by the emission factor of 2.0 lbs filterable particulate emissions/1000 gals given for fuel oil in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

b. Emission Limitation-

2.6 TPY particulate emissions

Applicable Compliance Method-

Compliance with this limitation shall be determined by summing the particulate emissions from the burning of natural gas and fuel oil in this emissions unit. For natural gas, the particulate emissions shall be determined by multiplying the annual natural gas usage as determined in section A.III.2., by the emission factor of 1.9 lbs filterable particulate emissions/mmscf given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 7/98, and dividing by 2000 lbs/ton. For fuel oil, the particulate emissions shall be determined by multiplying the annual fuel oil usage as determined in section A.III.2., by the emission factor of 2.0 lbs filterable particulate emissions/1000 gal given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3-1, 9/98, and dividing by 2000 lbs/ton.

Emissions Unit ID: B007

c. Emission Limitation-

0.05 lb/mmBtu SO₂

Applicable Compliance Method-

The 0.05 lb/mmBtu SO₂ limitation was developed by multiplying the emission factor for distillate fuel oil given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3-1, 9/98, (142 x % sulfur content of 0.05 = 7.1 lbs SO₂/1000 gals) by the maximum hourly fuel oil usage (431 gals/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

d. Emission Limitation-

4.40 TPY SO₂

Applicable Compliance Method-

Compliance with this limitation shall be determined by summing the SO₂ emissions from the burning of natural gas and fuel oil in this emissions unit. For natural gas, the SO₂ emissions shall be determined by multiplying the annual natural gas usage as determined in section A.III.2., by the emission factor of 0.6 lb SO₂/mmscf given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-2, 7/98, and dividing by 2000 lbs/ton. For fuel oil, the SO₂ emissions shall be determined by multiplying the annual fuel oil usage as determined in section A.III.2., by the emission factor for distillate fuel oil given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3-1, 9/98, (142 x % sulfur content of 0.05 = 7.1 lbs SO₂/1000 gals), and dividing by 2000 lbs/ton.

e. Emission Limitation-

0.14 lb/mmBtu NO_x

Applicable Compliance Method-

For the use of natural gas, compliance shall be based upon multiplying the hourly gas burning

capacity of the emissions unit (57,428.6 cu.ft/hr) by the emission factor of 100 lbs NO_x/mmscf given for natural gas in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 2/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). For the use of distillate fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (431 gals/hr) by the emission factor of 20 lbs NO_x/1000 gals given for fuel oil in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1, 9/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). Additionally, compliance with this limitation shall be determined through the stack testing requirement in section V.2.

f. Emission Limitation-

12.40 TPY NO_x, as a rolling 12-month summation

Applicable Compliance Method-

The 12.40 TPY NO_x, as a rolling 12-month summation limitation was developed by multiplying the emission factor for natural gas given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 2/98, (100 lbs NO_x/mmscf) by the annual natural gas usage (248 million cubic foot/yr), and dividing by 2000 lbs/ton.

Compliance with the 12.40 TPY NO_x, as a rolling 12-month summation shall be determined through the natural gas and fuel oil usage records in section A.III.2. and the following calculation:

$$\frac{[(20 \text{ lbs NO}_x/1000 \text{ gals oil})(F) + 100 \text{ lbs NO}_x/\text{mmscf})(G)]}{2000} < 12.4 \text{ TPY NO}_x, \text{ as a rolling 12- 2000 lbs/ton month summation}$$

Where:

F = amount of distillate fuel oil burned, in gallons per year

G = amount of natural gas burned, in million cubic feet per year

g. Emission Limitation

0.08 lb/mmBtu CO

Applicable Compliance Method-

The 0.08 lb/mmBtu CO limitation was developed by multiplying the emission factor for natural gas given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 2/98, (84 lbs CO/mmscf) by the maximum hourly natural gas usage (57,428.6 cubic foot/hr), and dividing by the maximum hourly heat

input capacity of the emissions unit (60.3 mmBtu/hr).

h. Emission Limitation-

10.42 TPY CO

Applicable Compliance Method-

Compliance with this limitation shall be determined by summing the CO emissions from the burning of natural gas and fuel oil in this emissions unit. For natural gas, the CO emissions shall be determined by multiplying the annual natural gas usage as determined in section A.III.2., by the emission factor of 84 lbs CO/mmscf given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-1, 2/98, and dividing by 2000 lbs/ton. For fuel oil, the CO emissions shall be determined by multiplying the annual fuel oil usage as determined in section A.III.2., by the emission factor of 5 lbs CO/1000 gals given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3-1, 9/98, and dividing by 2000 lbs/ton.

i. Emission Limitation-

0.005 lb/mmBtu OC

Applicable Compliance Method-

The 0.005 lb/mmBtu OC limitation was developed by multiplying the emission factor for natural gas given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-2, 7/98, (5.5 lbs OC/mmscf) by the maximum hourly natural gas usage (57,428.6 cubic foot/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

- j. Emission Limitation-
- 0.68 TPY OC
- Applicable Compliance Method-
 Compliance with this limitation shall be determined by summing the OC emissions from the burning of natural gas and fuel oil in this emissions unit. For natural gas, the OC emissions shall be determined by multiplying the annual natural gas usage as determined in section A.III.2., by the emission factor of 5.5 lbs OC/mmscf given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4-2, 7/98, and dividing by 2000 lbs/ton. For fuel oil, the OC emissions shall be determined by multiplying the annual fuel oil usage as determined in section A.III.2., by the emission factor of 0.2 lb OC/1000 gals given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3-3, 9/98, and dividing by 2000 lbs/ton.
- k. Emission Limitation-
- 5% visible emission opacity limit, as a 6-minute average except during periods of startup and shutdown
- Applicable Compliance Method-
 Compliance with the visible emission limitations is presumed based upon the use of natural gas or No. 2 fuel oil, fuels considered inherently clean. If required, visible emission evaluations shall be performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within twelve months of issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen dioxide.

- c. The test method employed to demonstrate compliance with the allowable mass emission rate for nitrogen dioxide shall be Method 7 of 40 CFR Part 60, Appendix A.
- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

1. The emissions unit B007 may be operated as an alternative OC emission control device to the Resin II thermal oxidizer. As such, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the boiler when it is operating as a OC control device. 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. The operational restrictions, monitoring and/or record

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keeping and reporting requirements for the combustion temperature in the boiler, when it is operating as an alternative OC control device, will be included in the permits for the emissions units (P022, P023, P024 and P025) associated with the Resin II thermal oxidizer.

2. This is a modification to PTI 08-2256 issued on April 1, 1992 and represents the following emission changes: (-) 1.12 TPY Particulate, (-) 9.0 TPY SO₂, (-) 10.46 TPY NO_x, (+) 1.09 TPY CO, and (-) 0.06 TPY OC.

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>
B007 - 60.3 mmBtu/hr natural gas/fuel oil fired boiler, B-803A; *Modification		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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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>
B010 - 17.5 mmBtu/hr diesel fired generator, MG-840; *Modification	OAC rule 3745-31-05 (A)(3)	0.18 particulate emissions (PE) TPY; 0.05 lb/mmBtu sulfur dioxide (SO ₂), 0.14 TPY SO ₂ ; 0.85 lb/mmBtu carbon dioxide (CO), 2.43 TPY CO; 0.09 lb/mmBtu organic compound (OC), 0.26 TPY OC; 10% visible emission opacity, as a 6-minute average except during periods of startup and shutdown The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11 (B)(5)(b) and 3745-31-05 (D).
	OAC rule 3745-31-05 (D) Synthetic Minor Restrictions	5.1 lbs/mmBtu nitrogen oxides (NO _x) 10 TPY NO _x , as a rolling 12-month summation
	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb particulate emissions/mmBtu actual heat input
	OAC rule 3745-17-07 (A)(1)	The emission limitations specified by this

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

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2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The permittee shall burn only distillate fuel oil in this emissions unit.
2. The maximum distillate fuel oil usage in this emissions unit shall not exceed 28,600 gallons/year, as a rolling 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the distillate fuel usage rates specified in the following table:

<u>Month</u>	<u>Distillate Fuel Usage (gallons)</u>	Maximum Allowable Cumulative
1-6	14,300	
1-7	16,683.33	
1-8	19,066.66	
1-9	21,449.99	
1-10	23,833.32	
1-11	26,216.65	
1-12	28,600	

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual fuel oil usage limitation shall be based upon a rolling, 12-month summation of the fuel oil usage rates.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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2. The permittee shall maintain monthly records of the following information:
 - a. The total amount of distillate fuel oil burned in this emissions unit, in gallons.
 - b. During the first 12 calendar months of operation, following issuance of this permit, the permittee shall record the cumulative distillate fuel oil usage, in gallons, for each calendar month.
 - c. Beginning after the first 12 calendar months of operation, following issuance of this permit, the permittee shall record the rolling, 12-month summation of distillate fuel oil usage, in gallons.
 - d. The total calculated emission rate of nitrogen oxides, in tons.
 - e. The rolling, 12-month summation of the nitrogen oxides emission rates, in tons.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of:
 - a. each day when a fuel other than distillate fuel oil was burned in this emissions unit;
 - b. the rolling, 12-month distillate fuel oil usage limitation; and
 - c. the rolling, 12-month NO_x emission limitation.
2. The permittee shall submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. All of the reports shall be submitted in accordance with section A.1.c. of the General Terms and Conditions.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

Emissions Unit ID: B010

a. Emission Limitation-

0.062 lb particulate emissions/mmBtu actual heat input

Applicable Compliance Method-
 Compliance shall be based upon the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2, 10/96, of 0.062 lb filterable particulate emissions/mmBtu. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03 (B)(10).

b. Emission Limitation-

0.18 TPY particulate emissions

Applicable Compliance Method-
 Compliance shall be determined based upon multiplying the distillate fuel oil usage as determined from the record keeping requirement A.III.2., by the heat content of the fuel (137,000 Btu/gal) by the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2, 10/96 of 0.062 lb particulate emissions/mmBtu, and dividing by 2000 lbs/ton.

c. Emission Limitation-

0.05 lb/mmBtu SO₂

Applicable Compliance Method-
 Compliance shall be based upon the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.05 lb SO₂/mmBtu (1.01 x 0.05% S).

d. Emission Limitation-

0.14 TPY SO₂

Applicable Compliance Method-

Compliance shall be determined based upon multiplying the distillate fuel oil usage as determined from the record keeping requirement A.III.2., by the heat content of the fuel (137,000 Btu/gal) by the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.05 lb SO₂/mmBtu, and dividing by 2000 lbs/ton.

e. Emission Limitation-

0.85 lb/mmBtu CO

Applicable Compliance Method-
Compliance shall be based upon the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.85 lb CO/mmBtu.

f. Emission Limitation-

2.43 TPY CO

Applicable Compliance Method-
Compliance shall be determined based upon multiplying the distillate fuel oil usage as determined from the record keeping requirement A.III.2., by the heat content of the fuel (137,000 Btu/gal) by the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.85 lb CO/mmBtu, and dividing by 2000 lbs/ton.

g. Emission Limitation-

0.09 lb/mmBtu OC

Applicable Compliance Method-

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Compliance shall be based upon the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.09 lb OC/mmBtu.

Emissions Unit ID: B010

h. Emission Limitation-

0.26 TPY OC

Applicable Compliance Method-
 Compliance shall be determined based upon multiplying the distillate fuel oil usage as determined from the record keeping requirement A.III.2., by the heat content of the fuel (137,000 Btu/gal) by the emission factor for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-1, 10/96 of 0.09 lb OC/mmBtu, and dividing by 2000 lbs/ton.

i. Emission Limitation-

5.1 lbs/mmBtu NOx

Applicable Compliance Method-
 Compliance shall be based upon the emission factor provided by the site specific emissions testing. Additionally, compliance with this limitation shall be determined through the stack testing requirement in section V.2.

j. Emission Limitation-

10 TPY NO_x, as a rolling 12-month summation

Applicable Compliance Method-
 Compliance shall be determined based upon multiplying the distillate fuel oil usage as determined from the record keeping requirement A.III.2., by the heat content of the fuel (137,000 Btu/gal) by the emission factor of 5.1 lbs NO_x/mmBtu, provided by the site specific emissions testing, and dividing by 2000 lbs/ton.

k. Emission Limitation-

10% visible emission opacity limit, as a 6-minute average during startup and shutdown

Applicable Compliance Method-
 Compliance with the visible emission

limitations is presumed based upon the use of natural gas or No. 2 fuel oil, fuels considered inherently clean. If required, visible emission evaluations shall be performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emissions testing shall be conducted within twelve months of issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen dioxide.

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- c. The test method employed to demonstrate compliance with the allowable mass emission rate for nitrogen dioxide shall be Method 7 of 40 CFR Part 60, Appendix A.
- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

1. This is a modification to PTI 08-2496 issued on August 6, 1993 and represents the following emission changes: (+) 0.14 TPY Particulate, (-) 0.18 TPY SO₂, (+) 8.0 TPY NO_x, (+) 1.93 TPY CO, and (+) 0.20 TPY OC.

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>
B010 - 17.5 mmBtu/hr diesel fired generator, MG-840; *Modification		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None