



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL  
RICHLAND COUNTY**

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: 03-13510**

**DATE: 2/6/2001**

Kronis Coatings Division  
Chris Fulk  
Jay Industries, Inc. 105 East Longview Avenue  
Mansfield, OH 44903-4205

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

NWDO



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 03-13510**

Application Number: 03-13510  
APS Premise Number: 0370010179  
Permit Fee: **\$2400**  
Name of Facility: Kronis Coatings Division  
Person to Contact: Chris Fulk  
Address: Jay Industries, Inc. 105 East Longview Avenue  
Mansfield, OH 44903-4205

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1575 West Longview Avenue**  
**Mansfield, Ohio**

Description of proposed emissions unit(s):  
**Installation of three co-generation systems.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

**Part I - GENERAL TERMS AND CONDITIONS****A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

**Kronis Coatings Division**  
**PTI Application: 03-13510**  
**Issued: 2/6/2001**

**Facility ID: 0370010179**

#### **14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

#### **15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

### **B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**  
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	6.6
NO <sub>x</sub>	60.3
CO	97.2
PE	1.71

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - 13.05 MMBtu/hr NG Fired Electrical Co-Generator #1.	OAC rule 3745-31-05 (A)(3)	Use of catalytic converter (See A.2.c.)  0.5 lb Organic Compounds (OC)/hr 2.2 tons OC/yr  4.6 lbs Nitrogen Oxides (NO <sub>x</sub> )/hr 20.1 tons NO <sub>x</sub> /yr  7.4 lbs Carbon Monoxide (CO)/hr 32.4 tons CO/yr  0.0095 lb Particulate Emissions (PE)/MMBtu  0.13 lb PE/hr 0.57 ton PE/yr
	OAC rule 3745-17-11 (B)(5)(b)	See A.2.a.
	OAC rule 3745-17-07 (A)	20 percent opacity as a six-minute average unless otherwise provided by rule.
	OAC rule 3745-18-06 (A)	See A.2.b.

**2. Additional Terms and Conditions**

Emissions Unit ID: **P002**

- 2.a** The requirements of this applicable rule are less stringent than the requirements specified under OAC rule 3745-31-05 (A)(3).
- 2.b** The emissions unit is exempt from the requirements of this rule because natural gas having a heat content of greater than 950 MMBtu/ft<sup>3</sup> and a sulfur content less than 0.6 lbs/MMft<sup>3</sup> is burned.
- 2.c** Best Available Technology (BAT) for this emissions unit has been determined to be the use of a catalytic converter meeting the following mass emission restrictions and achieving 100% capture efficiency:
- i. Organic compounds - 0.5 lb/hr;
  - ii. Nitrogen oxides - 4.6 lbs/hr; and
  - iii. Carbon monoxide - 7.4 lbs/hr.

**B. Operational Restrictions**

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

**C. Monitoring and/or Recordkeeping Requirements**

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

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**E. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for one of these emissions units contained in this Permit to Install #03-13510 for emissions units P002, P003, and P004. The results of this test will be used to demonstrate compliance with the allowable emissions rates of all of the co-generators (P002-P004) located at the facility. The test shall be conducted in accordance with the following requirements:
  - a. The emission testing shall be conducted no later than 90 days following the final issuance

of this permit.

- b. The emission testing shall be conducted on one of the emissions units to demonstrate compliance with the allowable mass emissions restrictions of: 0.5 lb organic OC/hr, 4.6 lbs NO<sub>x</sub>/hr, 7.4 lbs CO/hr, 0.13 lb particulate emissions (PE)/hr, and 0.0095 lb PE/MMBtu.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emissions rates:

Pollutant	Applicable 40 CFR Part 60, Appendix A Test Method
OC	Method 25
NO <sub>x</sub>	Method 7
PE (lb/hr & lb/MMBTU)	Method 5
CO	Method 10

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at 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

**Kronis Coatings Division**  
**PTI Application: 03 13510**  
**Issued**

**Facility ID: 0370010179**

Emissions Unit ID: **P002**

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, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

- a. Emission Limitation:  
0.5 lb OC/hr & 2.2 tons OC/yr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.
- b. Emission Limitation:  
4.6 lbs NO<sub>x</sub>/hr & 20.1 tons NO<sub>x</sub>/yr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.
- c. Emission Limitation:  
7.4 lbs CO/hr & 32.4 tons CO/yr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.
- d. Emission Limitation:  
0.0095 lb PE/MMBtu
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1.
- e. Emission Limitation:  
0.13 lb PE/hr & 0.57 ton PE/yr
- Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- f. Emission Limitation:  
20% opacity as a 6-minute average except as otherwise provided by rule

Applicable Compliance Method:  
OAC rule 3745-17-03 (B)(1)

#### **F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the maximum annual emissions for each toxic compound from all emission units contained in PTI #03-13510 will be less than 1.0 ton. 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 OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain new permit to install.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - 13.05 MMBtu/hr NG Fired Electrical Co-Generator #2.	OAC rule 3745-31-05 (A)(3)	Use of catalytic converter (See A.2.c.)  0.5 lb Organic Compounds (OC)/hr 2.2 tons OC/yr  4.6 lbs Nitrogen Oxides (NO <sub>x</sub> )/hr 20.1 tons NO <sub>x</sub> /yr  7.4 lbs Carbon Monoxide (CO)/hr 32.4 tons CO/yr  0.0095 lb Particulate Emissions (PE)/MMBtu  0.13 lb PE/hr 0.57 ton PE/yr
	OAC rule 3745-17-11 (B)(5)(b)	See A.2.a.
	OAC rule 3745-17-07 (A)	20 percent opacity as a six-minute average unless otherwise provided by rule.
	OAC rule 3745-18-06 (A)	See A.2.b.

**2. Additional Terms and Conditions**

- 2.a** The requirements of this applicable rule are less stringent than the requirements specified under OAC rule 3745-31-05 (A)(3).
- 2.b** The emissions unit is exempt from the requirements of this rule because natural gas having a heat content of greater than 950 MMBtu/ft<sup>3</sup> and a sulfur content less than 0.6 lbs/MMft<sup>3</sup> is burned.
- 2.c** Best Available Technology (BAT) for this emissions unit has been determined to be the use of a catalytic converter meeting the following mass emission restrictions and achieving 100% capture efficiency:
- i. Organic compounds - 0.5 lb/hr;
  - ii. Nitrogen oxides - 4.6 lbs/hr; and
  - iii. Carbon monoxide - 7.4 lbs/hr.

**B. Operational Restrictions**

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

**C. Monitoring and/or Recordkeeping Requirements**

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

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**E. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for one of these emissions units contained in this Permit to Install #03-13510 for emissions units P002, P003, and P004. The results of this test will be used to demonstrate compliance with the allowable emissions rates of all of the co-generators (P002-P004) located at the facility. The test shall be conducted in accordance with the following requirements:

- a. The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
- b. The emission testing shall be conducted on one of the emissions units to demonstrate compliance with the allowable mass emissions restrictions of: 0.5 lb organic OC/hr, 4.6 lbs NO<sub>x</sub>/hr, 7.4 lbs CO/hr, 0.13 lb particulate emissions (PE)/hr, and 0.0095 lb PE/MMBtu.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emissions rates:

Pollutant	Applicable 40 CFR Part 60, Appendix A Test Method
OC	Method 25
NO <sub>x</sub>	Method 7
PE (lb/hr & lb/MMBTU)	Method 5
CO	Method 10

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at 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.

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**Facility ID: 0370010179**

Emissions Unit ID: **P003**

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, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

- a. Emission Limitation:  
0.5 lb OC/hr & 2.2 tons OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- b. Emission Limitation:  
4.6 lbs NO<sub>x</sub>/hr & 20.1 tons NO<sub>x</sub>/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- c. Emission Limitation:  
7.4 lbs CO/hr & 32.4 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- d. Emission Limitation:  
0.0095 lb PE/MMBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1.

- e. Emission Limitation:  
0.13 lb PE/hr & 0.57 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on

the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- f. Emission Limitation:  
20% opacity as a 6-minute average except as otherwise provided by rule

Applicable Compliance Method:  
OAC rule 3745-17-03 (B)(1)

## **F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the maximum annual emissions for each toxic compound from all emission units contained in PTI #03-13510 will be less than 1.0 ton. 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 OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain new permit to install.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - 13.05 MMBtu/hr NG Fired Electrical Co-Generator #3.	OAC rule 3745-31-05 (A)(3)	Use of catalytic converter (See A.2.c.)  0.5 lb Organic Compounds (OC)/hr 2.2 tons OC/yr  4.6 lbs Nitrogen Oxides (NO <sub>x</sub> )/hr 20.1 tons NO <sub>x</sub> /yr  7.4 lbs Carbon Monoxide (CO)/hr 32.4 tons CO/yr
		0.0095 lb Particulate Emissions (PE)/MMBtu  0.13 lb PE/hr 0.57 ton PE/yr
	OAC rule 3745-17-11 (B)(5)(b)	See A.2.a.
	OAC rule 3745-17-07 (A)	20 percent opacity as a six-minute average unless otherwise provided by rule.
	OAC rule 3745-18-06 (A)	See A.2.b.

**2. Additional Terms and Conditions**

- 2.a** The requirements of this applicable rule are less stringent than the requirements specified under OAC rule 3745-31-05 (A)(3).
- 2.b** The emissions unit is exempt from the requirements of this rule because natural gas having a heat content of greater than 950 MMBtu/ft<sup>3</sup> and a sulfur content less than 0.6 lbs/MMft<sup>3</sup> is burned.
- 2.c** Best Available Technology (BAT) for this emissions unit has been determined to be the use of a catalytic converter meeting the following mass emission restrictions and achieving 100% capture efficiency:
- i. Organic compounds - 0.5 lb/hr;
  - ii. Nitrogen oxides - 4.6 lbs/hr; and
  - iii. Carbon monoxide - 7.4 lbs/hr.

**B. Operational Restrictions**

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

**C. Monitoring and/or Recordkeeping Requirements**

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

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**E. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for one of these emissions units contained in this Permit to Install #03-13510 for emissions units P002, P003, and P004. The results of this test will be used to demonstrate compliance with the allowable emissions rates of all of the co-generators (P002-P004) located at the facility. The test shall be conducted in accordance with the following requirements:

- a. The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
- b. The emission testing shall be conducted on one of the emissions units to demonstrate compliance with the allowable mass emissions restrictions of: 0.5 lb organic OC/hr, 4.6 lbs NO<sub>x</sub>/hr, 7.4 lbs CO/hr, 0.13 lb particulate emissions (PE)/hr, and 0.0095 lb PE/MMBtu.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emissions rates:

Pollutant	Applicable 40 CFR Part 60, Appendix A Test Method
OC	Method 25
NO <sub>x</sub>	Method 7
PE (lb/hr & lb/MMBTU)	Method 5
CO	Method 10

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at 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.

**Kronis Coatings Division**  
**PTI Application: 03 13510**  
**Issued**

**Facility ID: 0370010179**

Emissions Unit ID: **P004**

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, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

- a. Emission Limitation:  
0.5 lb OC/hr & 2.2 tons OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- b. Emission Limitation:  
4.6 lbs NO<sub>x</sub>/hr & 20.1 tons NO<sub>x</sub>/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- c. Emission Limitation:  
7.4 lbs CO/hr & 32.4 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- d. Emission Limitation:  
0.0095 lb PE/MMBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1.

- e. Emission Limitation:  
0.13 lb PE/hr & 0.57 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based on

the results of the stack test on the emissions unit, or a similar emissions unit, as required in section E.1. Compliance with the annual limitation will be demonstrated by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr.

- f. Emission Limitation:  
20% opacity as a 6-minute average except as otherwise provided by rule

Applicable Compliance Method:  
OAC rule 3745-17-03 (B)(1)

## **F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the maximum annual emissions for each toxic compound from all emission units contained in PTI #03-13510 will be less than 1.0 ton. 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 OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain new permit to install.

**NEW SOURCE REVIEW FORM B**

PTI Number: 03-13510 Facility ID: 0370010179

FACILITY NAME Kronis Coatings Division

FACILITY DESCRIPTION Installation of three co-generation systems. CITY/TWP Mansfield

SIC CODE 3479 SCC CODE 0-02-002-99 EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 13.05 MMBtu/hr NG Fired Electrical Generator #1.

DATE INSTALLED 6/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.13 lb/hr	0.22	0.13 lb/hr	0.57
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	Attainment	0.5 lb/hr	0.9	0.5 lb/hr	2.2
Nitrogen Oxides	Attainment	4.6 lb/hr	7.8	4.6 lb/hr	20.1
Carbon Monoxide	Attainment	7.4 lb/hr	12.5	7.4 lb/hr	32.4
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NO NESHAP? NO PSD? NO OFFSET POLICY? NO

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

Enter Determination Compliance with the terms and conditions of this permit and use of catalytic converter.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

**NEW SOURCE REVIEW FORM B**

PTI Number: 03-13510

Facility ID: 0370010179

FACILITY NAME Kronis Coatings Division

FACILITY DESCRIPTION Installation of three co-generation systems. CITY/TWP Mansfield

Emissions Unit ID: P004

SIC CODE 3479

SCC CODE 2-02-002-99

EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION 13.05 MMBtu/hr NG Fired Electrical Generator #2.

DATE INSTALLED 6/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.13 lb/hr	0.22	0.13 lb/hr	0.57
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	Attainment	0.5 lb/hr	0.9	0.5 lb/hr	2.2
Nitrogen Oxides	Attainment	4.6 lb/hr	7.8	4.6 lb/hr	20.1
Carbon Monoxide	Attainment	7.4 lb/hr	12.5	7.4 lb/hr	32.4
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NO

NESHAP? NO

PSD? NO

OFFSET POLICY? NO

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

Enter Determination Compliance with the terms and conditions of this permit and use of catalytic converter.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

**2 NEW SOURCE REVIEW FORM B**

PTI Number: 03-13510

Facility ID: 0370010179

FACILITY NAME Kronis Coatings Division

FACILITY DESCRIPTION Installation of three co-generation systems. CITY/TWP Mansfield

Emissions Unit ID: **P004**

SIC CODE 3479

SCC CODE 2-02-002-99

EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION 13.05 MMBtu/hr NG Fired Electrical Generator #3.

DATE INSTALLED 6/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.13 lb/hr	0.22	0.13 lb/hr	0.57
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	Attainment	0.5 lb/hr	0.9	0.5 lb/hr	2.2
Nitrogen Oxides	Attainment	4.6 lb/hr	7.8	4.6 lb/hr	20.1
Carbon Monoxide	Attainment	7.4 lb/hr	12.5	7.4 lb/hr	32.4
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NO

NESHAP? NO

PSD? NO

OFFSET POLICY? NO

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

**Enter Determination** Compliance with the terms and conditions of this permit and use of catalytic converter.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES X NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

28 **NEW SC**

PTI Num

FACILITY

Emissions Unit ID: **P004** \_\_\_\_\_

FACILITY DESCRIPTION Installation of three co-generation systems. CITY/TWP Mansfield

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to [airpti@epa.state.oh.us](mailto:airpti@epa.state.oh.us)

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	000000c.wpd	<input checked="" type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

This PTI is for the installation of three 13.05 MMBtu/hr natural gas fired reciprocating engines with non-selective catalytic converters attached to 1150 KW electrical generators. The potential emissions reflect the control efficiency, which is integral to the operation of the generators.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or  Netting Determination

Permit To Install ENTER PTI NUMBER HERE

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

**NEW SOURCE REVIEW FORM B**

PTI Number: 03-13510

Facility ID: 0370010179

FACILITY NAME Kronis Coatings Division

FACILITY DESCRIPTION Installation of three co-generation svstems. CITY/TWP Mansfield

Emissions Unit ID: **P004**

Please complete:

**SUMMARY (for informational purposes only)**  
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	6.6
NO <sub>x</sub>	60.3
CO	97.2
PE	1.71