



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 03-16048

DATE: 6/17/2004

Pro-Tec Coating Company
Rick Rupert
5000 County Road #5
Leipsic, OH 45856-9234

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

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

CC: USEPA

NWDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 6/17/2004
Effective Date: 6/17/2004**

FINAL PERMIT TO INSTALL 03-16048

Application Number: 03-16048
APS Premise Number: 0369000025
Permit Fee: **\$800**
Name of Facility: Pro-Tec Coating Company
Person to Contact: Rick Rupert
Address: 5000 County Road #5
Leipsic, OH 45856-9234

Location of proposed air contaminant source(s) [emissions unit(s)]:
5000 County Road #5
Leipsic, Ohio

Description of proposed emissions unit(s):
Modification to annealing furnace. (P001).

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping 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.9 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 ninety (90) 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

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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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>
NO _x	42.05
CO	54.31
PE	3.15
OC	4.56

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Pro-Tec Coating Company
PTI Application: **03-16048**
Issued: 6/17/2004

Facility ID: **0369000025**

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Pro-Te

PTI A₁

Issued: 6/17/2004

Emissions Unit ID: P001

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>
P001 - 96 MMBTU/hr natural gas-fired continuous annealing furnace, with 16 MMBtu/hr auxiliary natural gas-fired burners* [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temp. within the recommended range]	OAC rule 3745-31-05(A)(3)	0.10 lbs nitrogen oxides (NO _x)/MMBtu (see A.I.2.d) 9.6 lbs NO _x /hr (see A.I.2.d) 42.05 tons NO _x /yr 12.4 lbs carbon monoxide (CO)/hr and 54.31 tons CO/yr 0.72 lbs particulate emissions (PE)/hr and 3.15 tons PE/yr**
[This is an administrative modification to PTI #03-6093 issued 8/31/2000]		1.04 tons organic compounds (OC)/hr and 4.56 tons OC/yr
The modification involves the increase of the maximum firing rate and the respective emission rates for the pollutants	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)(2) federal consent decree	see A.I.2.a see A.I.2.b see A.I.2.c

* Auxiliary burners operate at a variable output between zero and one hundred percent as needed to maintain recommended gas temperatures within the selective catalytic reduction (SCR) control device. The supplemental heat provided by the auxiliary burners is designed to maintain the temperature, as recommended by the system

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Pro-Te

PTI A₁

Issued: 6/17/2004

Emissions Unit ID: P001

manufacturer, for efficient NO_x reduction at the SCR device. The 96 MMBTU/hr value is based on the maximum combined capacity of the annealing furnace and the auxiliary burners.

** All PE is assumed to be PM₁₀.

Emissions Unit ID: P001

2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b** The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the facility is located in Putnam County, which is identified as a P-2 County.
- 2.c** The facility agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV7749, entered 2/11/1998) requiring the permittee to install an SCR unit to continuously control NO_x emissions to an emission rate not to exceed 0.10 lbs NO_x/MMBTU.
- 2.d** The permittee shall employ North American regenerative-type burners with flue gas recirculation and a NO_x OUT SCR system with Hauck direct-fired burners to maintain the recommended gas temperatures for NO_x emissions reduction. The NO_x emissions shall be limited to 0.10 lbs NO_x/MMBTU, based on a 3-hour rolling average, when this emissions unit is in operation. For this requirement, "in operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down. During times that the furnace is not "in operation" and the main burners are idling or only the pilot burners are operating, NO_x emissions shall not exceed 9.6 lbs/hr*.
- * The 9.6 lbs NO_x per hour limitation shall be based on a 3-hour rolling average.
- 2.e** The NO_x analyzers associated with this emissions unit are used as part of the process control system for the SCR unit. The data from the analyzers is used to adjust the urea injection flow rate to optimize the performance of the SCR unit. These analyzers were not installed with the intent of satisfying the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 2, and they can not be certified as true continuous NO_x monitoring systems. Even though the analyzers can not be certified as true continuous NO_x monitoring systems, they have demonstrated that they provide accurate NO_x emission concentration data as compared to emission concentration data simultaneously obtained through 40 CFR Part 60, Appendix A, Method 7E. As such, the data from the analyzers will be used to ensure ongoing compliance with the NO_x emission limitations.

II. Operational Restrictions

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

2. The permittee shall continuously monitor and record NO_x emissions at the discharge of each SCR unit, when the emissions unit is in operation, and shall continuously maintain NO_x emissions within all applicable limitations contained in this permit.
3. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
4. The maximum heat input (including the lance pilot) shall not exceed 96 MMBTU per hour.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The urea/gas ratio shall be determined and adjusted on a continuous basis by a primary control circuit based on natural gas flow rate, which shall determine the appropriate urea flow rate to each SCR unit. Additionally, a secondary control circuit shall be utilized consisting of a NO_x analyzer which shall increase or decrease the urea flow rate according to NO_x concentrations observed at the discharge of each SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of each SCR control system and minimize ammonia slip to the atmosphere.
3. The permittee shall operate and maintain equipment necessary to continuously monitor the following parameters for the SCR NO_x control unit while this emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee:
 - a. the urea flow rate, in gallons per hour;
 - b. the natural gas flow rate, in standard cubic feet per hour;
 - c. the SCR inlet temperature, in degrees Fahrenheit;
 - d. the number of hours the SCR unit was in operation; and
 - e. the number of hours this emissions unit was in operation.

4. The permittee shall collect and record the following information each month for this emissions unit;
 - a. the total urea usage, in gallons;

- b. the total natural gas usage, in standard cubic feet;
 - c. the daily urea to natural gas flow ratio (section A.III.3.a./section A.III.3.b.), in gallons of urea per each standard cubic feet of natural gas;
 - d. the monthly average Btu content of fuel (Btu per standard cubic foot) as specified by the natural gas supplier;
 - e. the heat input rate (b. x d.), in MMBTU;
 - f. the number of hours and specific hours the emissions unit was "in operation";
 - g. the number of hours and specific hours the emissions unit was not "in operation";
 - h. the average hourly heat input rate for this emissions unit (e./f.), in MMBtu/hr;
 - i. the number of hours the SCR system associated with this emissions unit was in operation;
 - j. the total number of 3-hour average periods during which the temperature was monitored at the inlet of the SCR unit;
 - k. all 3-hour blocks of time during which the average temperature of the flue gases at the inlet to the SCR unit, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
 - l. all 3-hour periods during which the NO_x emission rate was monitored at the outlet of the SCR unit;
 - m. all 3-hour periods during which the average NO_x emission rate was greater than 9.6 pounds NO_x per hour; and
 - n. all 3-hour periods during which the average NO_x emission rate was greater than 0.10 pounds NO_x per MMBTU.
5. The permittee shall maintain daily records of the following information for this emissions unit:
- a. the total number of hours the emissions unit was in operation;
 - b. the total natural gas fuel usage, in million cubic feet; and

- c. the firing rate, in MMBtu/hr, using the following equation:

firing rate (MMBtu/hr) = [total daily natural gas usage (million cubic feet/day) x (the Btu value from section A.III.4.d)]/[the total number of hours per day the emissions unit was in operation - from section A.III.4.f above].

6. The permittee shall operate and maintain the existing equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard. The NO_x analyzers and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations and the procedures specified in the permittee's ISO 14001 document titled "Work Instructions for Monitoring, Calibration and Maintenance of O₂ and NO_x Analyzers."

The permittee shall maintain records of all data obtained by the continuous NO_x analyzers including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (i.e., pounds/hour and pounds/MMBtu for each rolling, 3-hour period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
 - a. the 3-hour average NO_x emission limitation of 9.6 lbs/hr*;
 - b. the 3-hour average NO_x emission limitation of 0.10 lbs/MMBTU*;
 - c. the 3-hour average SCR inlet temperature, in Fahrenheit, required by Section A.II.3*; and
 - d. the maximum heat input rate of 96.0 MMBtu per hour.

All quarterly reports shall be submitted in accordance with the General Terms and Conditions of this permit. These reports shall also contain the total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line and the total NO_x

Emissions Unit ID: P001

emissions for the calendar quarter (in tons).

* Any 3-hour average SCR inlet temperature value that was more than 50 degrees Fahrenheit below the average temperature during the most recent emission testing that demonstrated the emissions unit was in compliance may be considered to be an exceedance only if it occurred concurrently with an exceedance of the 0.1 pounds NO_x per MMBtu or the 9.6 pounds NO_x/hr limitations (based upon a 3-hour average of the emission rates).

3. The permittee shall submit deviation (excursion) reports which identify any exceedances of the firing rate of 96 MMBtu/hr, as well as the corrective actions that were taken to achieve compliance.

V. Testing Requirements

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

- a. Emission Limitation:
0.10 lbs NO_x/MMBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the lbs/MMBtu emission limitation based upon the results of the stack testing specified in section A.V.2 of the terms and conditions of this permit.

- b. Emission Limitation:
9.6 lbs NO_x/hr and 42.05 tons NO_x/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- c. Emission Limitation:
12.4 lb CO/hr and 54.31 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation..

- d. Emission Limitation:
1.04 lb OC/hr and 4.56 tons OC/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb/hr emission limitation based upon the calculations using the maximum rated capacity of the annealing furnace and auxiliary natural gas burners (96 MMBtu/hr), an AP-42 Chapter 1.4 (7/98) emission factor of 11.0 lb OC/10⁶ cf of natural gas and 1020 Btu/cf of natural gas. If required, compliance shall be determined using the test methods described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

e. Emission Limitation:

0.72 lb PE/hr and 3.15 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the lb/hr emission limitation based upon the calculations using the maximum rated capacity of the annealing furnace and auxiliary natural gas burners (96 MMBtu/hr), an AP-42 Chapter 1.4 (7/98) emission factor of 7.6 lb PE/10⁶ cf of natural gas and 1020 Btu/cf of natural gas. If required, compliance shall be determined using the test methods described in Method 5 of 40 CFR Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months of the installation of this emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitations for NO_x and CO.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. NO_x - Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A

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- ii. CO - Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
 - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA's Northwest District Office.

* During the emission testing, the permittee shall also record the average temperature of the exhaust gases immediately before the catalyst bed for each run.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA's Northwest District Office. 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 Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA's Northwest District Office 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 Northwest District Office 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 Northwest District Office.

VI. Miscellaneous Requirements

1. This PTI supercedes all limits, terms and conditions for emissions unit P001 contained in PTI #03-6093 issued August 31, 2000.

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>
P001 - 96 MMBtu/hr natural gas-fired continuous annealing furnace, with 16 MMBtu/hr auxiliary natural gas-fired burners* [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temp. within the recommended range] [This is an administrative modification of PTI #03-6093 issued 8/31/2000] The modification involves the increase of the maximum firing rate and the respective emission rates for the pollutants	See B.III.1	See B.III.1

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

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None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for emission unit, P001, was evaluated based on the calculated emissions as designed, and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for ammonia emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m³): 17,000

Maximum Hourly Emission Rate (lbs/hr): 1.82

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 6.5

MAGLC (µg/m³): 404.8

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the compositions of the materials, or use of new materials that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the

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Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

4. The permittee shall collect, record, and retain the following information when it conducts evaluation to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.)
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None