State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

RE: PERMIT TO INSTALL ***CORRECTED COPY 1/15/2008***
PUTNAM COUNTY
Application No:03-14070

DATE: 1/15/2008

Pro-Tec Coating Company
Rick Rupert
5000 County Road #5
Leipsic, OH 458569234

Attached please find a corrected copy of PTI 03-14070 issued **11/8/2007**. This corrected copy is being sent due to administrative processing errors and does not affect the enforceability or effective date of the Directors final action. Please note, the appearance of the corrected document may have changed due to changing software or printers (e.g., total number of pages, margins, etc.). Areas of the permit that have been substantively affected by the correction(s) are highlighted in the enclosed "Corrected Copy". I urge you to review these areas in relation to the issued permit document. Please replace the copy provided to you on **11/8/2007** with the attached corrected Permit To Install document. *Please note:* No payment is required for processing this corrected copy.

Very truly yours,

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

cc: **USEPA** **NWDO**

State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
PUTNAM COUNTY
Application No: 03-14070

Street Address: 50 West Town Street, Suite 700
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address: Lazarus Gov. Center P.O. Box 1049

Fac ID: 0369000025
*****CORRECTED COPY 1/15/2008*****
DATE: 11/8/2007

Pro-Tec Coating Company
Rick Rupert
5000 County Road #5
Leipsic, OH 458569234

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA NWDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 11/8/2007**
Terms and Conditions **Effective Date: 11/8/2007**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-14070
*****CORRECTED COPY 1/15/2008*****

Application Number:	03-14070
Facility ID:	0369000025
Permit Fee:	**$1600**
Name of Facility:	Pro-Tec Coating Company
Person to Contact:	Rick Rupert
Address:	5000 County Road #5 Leipsic, OH 458569234

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

Description of proposed emissions unit(s):
Modify B001, B002, B043 and B044.

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

Chris Korleski
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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 (i.e., postmarked) quarterly, 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification

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, 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 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 (i.e., postmarked) quarterly, 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. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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 <u>Federally Enforceable</u> 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., postmarked), 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

Pollutant	Tons Per Year
NOx	8.6
CO	7.2
PE	1.5

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

Emissions Unit ID: B001

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B001 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-6093 issued on 08/31/00) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	OAC rule 3745-31-05 (A)(3)	0.49 lb nitrogen oxide (NO_x)/hr; 2.15 tons NO_x/yr
		0.54 lbs carbon monoxide (CO)/hr; 2.4 tons CO/yr
		0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr
		control requirements (see A.I.2.a)
		see A.I.2.b
	40 CFR Part 60 Subpart Dc	recordkeeping requirements (see A.III.2.)
	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule
	OAC rule 3745-18-06	see A.I.2.c.
	OAC rule 3745-17-10(B)(1)	see A.I.2.d
	OAC rule 3745-21-08(B)	see A.I.2.e
	OAC rule 3745-23-06(B)	see A.I.2.e

2. Additional Terms and Conditions

2.a Best available technology (BAT) control requirements for this emissions unit has been determined to be use of low NO_x burners. BAT also includes compliance with the terms

and conditions of this permit.

Pro Tec Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas fired low NO_x burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lbs NO_x/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

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

2.c This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

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

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

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 permittee shall record and maintain records of the amounts of each fuel combusted during each day.

3. While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Form for Boilers form (as found in term VI.3). An

alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

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

2. The permittee shall submit notification of the following:

   a. date maximum capacity of this emissions unit was physically and permanently reduced (no later than 30 days after such date);

   b. the maximum heat input capacity of and identification of fuels to be combusted in this emissions unit (same due date as in A.IV.3.a above); and

   c. actual start-up date under reduced maximum capacity (within 15 days after such date).

   Notifications are to be sent to:

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

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, OH 43402

3. The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

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

a. Emission Limitations
0.49 lb NO_x/hr, 2.15 tons NO_x/yr

Applicable Compliance Methods
The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0***33*** lb NO_x/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

b. Emission Limitations
0.54 lbs CO/hr, 2.4 tons CO/yr

Applicable Compliance Methods
The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

c. Emission Limitations
0.11 lb PE/hr, 0.5 ton PE/yr

Applicable Compliance Methods
The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If

required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler (14.7 mmBtu/hr), the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 7.6 lbs PE/1000 mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

d. Emission Limitation
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method
If required, the permittee shall demonstrate compliance with the visible emissions limitation in accordance with the methods specified in OAC 3745-17-03 (B)(1).

2. Burner Tuning

a. Introduction

The permittee may conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NOx. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boilers form (as found in F.3) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

i. Review the plant operations to ensure the boiler is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

3. The firing rate of the boiler shall be at least 11.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 ^{o}F at the cleaner section of the continuous galvanizing line when stack

testing or burner tuning is being conducted.

VI. Miscellaneous Requirements

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install number 03-0609 issued August 31, 2000.

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

3. Burner Tuning Form (see Attachment A of this document)

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B001 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-6093 issued on 08/31/00) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	See B.VI.	See B.VI.

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

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound 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 a new permit to install.

Emissions Unit ID: B002

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B002 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-6093 issued on 08/31/00) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	OAC rule 3745-31-05 (A)(3)	0.49 lb nitrogen oxide (NO_x)/hr; 2.15 tons NO_x/yr
		0.54 lbs carbon monoxide (CO)/hr; 2.4 tons CO/yr
		0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr
		control requirements (see A.I.2.a)
		see A.I.2.b
	40 CFR Part 60 Subpart Dc	recordkeeping requirements (see A.III.2.)
	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule
	OAC rule 3745-18-06	see A.I.2.c.
	OAC rule 3745-17-10(B)(1)	see A.I.2.d
	OAC rule 3745-21-08(B)	see A.I.2.e
	OAC rule 3745-23-06(B)	see A.I.2.e

2. Additional Terms and Conditions

2.a Best available technology (BAT) control requirements for this emissions unit has been determined to be use of low NO_x burners. BAT also includes compliance with the terms and conditions of this permit.

Pro Tec Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas fired low NO_x burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lbs NO_x/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

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

2.c This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

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

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

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 permittee shall record and maintain records of the amounts of each fuel combusted during each day.

3. While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Form for Boilers form (as found in term VI.3). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

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

2. The permittee shall submit notification of the following:

   a. date maximum capacity of this emissions unit was physically and permanently reduced (no later than 30 days after such date);

   b. the maximum heat input capacity of and identification of fuels to be combusted in this emissions unit (same due date as in A.IV.3.a.above); and

   c. actual start-up date under reduced maximum capacity (within 15 days after such date).

   Notifications are to be sent to:

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

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, OH 43402

3. The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

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

   a. Emission Limitations
   0.49 lb NO_x/hr, 2.15 tons NO_x/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0***33*** lb NO_x/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   b. Emission Limitations
   0.54 lbs CO/hr, 2.4 tons CO/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   c. Emission Limitations
   0.11 lb PE/hr, 0.5 ton PE/yr

Applicable Compliance Methods
The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler (14.7 mmBtu/hr), the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 7.6 lbs PE/1000 mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

d. Emission Limitation
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method
If required, the permittee shall demonstrate compliance with the visible emissions limitation in accordance with the methods specified in OAC 3745-17-03 (B)(1).

2. Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx, and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NOx, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boiler form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

i. Review the plant operations to ensure the plant is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the

"Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers form produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

3. The firing rate of the boiler shall be at least 11.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 ^{o}F at the cleaner section of the continuous galvanizing line when stack testing or burner tuning is being conducted.

Emissions Unit ID: B002

VI. Miscellaneous Requirements

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install number 03-0609 issued August 31, 2000.

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

3. Burner Tuning Form (see Attachment A of this document)

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B002 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-6093 issued on 08/31/00) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	See B.VI.	See B.VI.

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

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound 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 a new permit to install.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-23-06(B)
B043 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-10957 issued on 12/04/01) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	OAC rule 3745-31-05 (A)(3)	
	40 CFR Part 60 Subpart Dc	
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-18-06	
	OAC rule 3745-17-10(B)(1)	
	OAC rule 3745-21-08(B)	

Emissions Unit ID: B043

Applicable Emissions Limitations/Control Measures
0.49 lb nitrogen oxide (NO_x)/hr; 2.15 tons NO_x/yr
0.54 lbs carbon monoxide (CO)/hr; 2.4 tons CO/yr
0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr
control requirements (see A.I.2.a)
see A.I.2.b
recordkeeping requirements (see A.III.2.)
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule
see A.I.2.c.
see A.I.2.d
see A.I.2.e
see A.I.2.e

2. Additional Terms and Conditions

2.a Best available technology (BAT) control requirements for this emissions unit has been determined to be use of low NO_x burners. BAT also includes compliance with the terms and conditions of this permit.

Pro Tec Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas fired low NO_x burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lbs NO_x/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

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

2.c This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

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

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

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 permittee shall record and maintain records of the amounts of each fuel combusted during each day.

3. While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Form for Boilers form (as found in term VI.3). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

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

2. The permittee shall submit notification of the following:

   a. date maximum capacity of this emissions unit was physically and permanently reduced (no later than 30 days after such date);

   b. the maximum heat input capacity of and identification of fuels to be combusted in this emissions unit (same due date as in A.IV.3.a.above); and

   c. actual start-up date under reduced maximum capacity (within 15 days after such date).

   Notifications are to be sent to:

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

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, OH 43402

3. The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the

appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

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

   a. Emission Limitations
   0.49 lb NO_x/hr, 2.15 tons NO_x/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.033 lb NO_x/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   b. Emission Limitations
   0.54 lbs CO/hr, 2.4 tons CO/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   c. Emission Limitations
   0.11 lb PE/hr, 0.5 ton PE/yr

Applicable Compliance Methods
The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler (14.7 mmBtu/hr), the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 7.6 lbs PE/1000 mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

d. Emission Limitation
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method
If required, the permittee shall demonstrate compliance with the visible emissions limitation in accordance with the methods specified in OAC 3745-17-03 (B)(1).

2. Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx, and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NOx, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boilers form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

i. Review the plant operations to ensure the plant is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the

"Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

3. The firing rate of the boiler shall be at least 11.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 ^{o}F at the cleaner section of the continuous galvanizing line when stack testing or burner tuning is being conducted.

VI. Miscellaneous Requirements

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install number 03-0609 issued August 31, 2000.

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

3. Burner Tuning Form (see Attachment A of this document)

Emissions Unit ID: B043

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B043 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-10957 issued on (12/04/01) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	See B.VI.	See B.VI.

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

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound 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 a new permit to install.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-23-06(B)
B044 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-10957 issued on 12/04/01) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	OAC rule 3745-31-05 (A)(3)	
	40 CFR Part 60 Subpart Dc	
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-18-06	
	OAC rule 3745-17-10(B)(1)	
	OAC rule 3745-21-08(B)	

Applicable Emissions Limitations/Control Measures
0.49 lb nitrogen oxide (NO_x)/hr; 2.15 tons NO_x/yr
0.54 lbs carbon monoxide (CO)/hr; 2.4 tons CO/yr
0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr
control requirements (see A.I.2.a)
see A.I.2.b
recordkeeping requirements (see A.III.2.)
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule
see A.I.2.c.
see A.I.2.d
see A.I.2.e
see A.I.2.e

Emissions Unit ID: B044

2. Additional Terms and Conditions

2.a Best available technology (BAT) control requirements for this emissions unit has been determined to be use of low NO_x burners. BAT also includes compliance with the terms and conditions of this permit.

Pro Tec Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas fired low NO_x burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lbs NO_x/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

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

2.c This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

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

2.e The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

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 permittee shall record and maintain records of the amounts of each fuel combusted during each day.

3. While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Form for Boilers form (as found in term VI.3). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

IV. Reporting Requirements

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

2. The permittee shall submit notification of the following:

   a. date maximum capacity of this emissions unit was physically and permanently reduced (no later than 30 days after such date);

   b. the maximum heat input capacity of and identification of fuels to be combusted in this emissions unit (same due date as in A.IV.3.a.above); and

   c. actual start-up date under reduced maximum capacity (within 15 days after such date).

   Notifications are to be sent to:

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

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, OH 43402

3. The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the

appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

Emissions Unit ID: B044

V. Testing Requirements

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

   a. Emission Limitations
   0.49 lb NO_x/hr, 2.15 tons NO_x/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0***33*** lb NO_x/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   b. Emission Limitations
   0.54 lbs CO/hr, 2.4 tons CO/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

   * The potential to emit for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

   c. Emission Limitations
   0.11 lb PE/hr, 0.5 ton PE/yr

   Applicable Compliance Methods
   The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no monitoring and recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1-5 of 40 CFR Part 60,

Appendix A.

* The potential to emit for this emissions unit is based on the maximum capacity of the boiler (14.7 mmBtu/hr), the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 7.6 lbs PE/1000 mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual potential to emit is based on the hourly potential to emit and a maximum operating schedule of 8,760 hrs/yr.

d. Emission Limitation
Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method
If required, the permittee shall demonstrate compliance with the visible emissions limitation in accordance with the methods specified in OAC 3745-17-03 (B)(1).

2. Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx, and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating

manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NOx, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boiler Plants form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

i. Review the plant operations to ensure the plant is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

v. Once all of the measured stack exhaust gas values are within the 115 percent of the

pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

3. The firing rate of the boiler shall be at least 11.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 ^{o}F at the cleaner section of the continuous galvanizing line when stack testing or burner tuning is being conducted.

VI. Miscellaneous Requirements

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install number 03-0609 issued August 31, 2000.

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

3. Burner Tuning Form (see Attachment A of this document)

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B044 - 14.7 mmBtu/hr - natural gas (modification to PTI #03-10957 issued on 12/04/01) modification to physically and permanently derate the maximum capacity of the boiler from a heat input of 20.9 to 14.7 mmBtu/hr and to revise the terms and conditions of the previously issued PTI (Modification to PTI #03-14070 to adjust NOx limits to comply Consent Decree with the United States of America (Civil Action No. 3:98CV 7749))	See B.VI.	See B.VI.

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

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound 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 a new permit to install.