



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 03-16372

Fac ID: 0387020404

DATE: 1/19/2006

Dowa THT America, Inc.
Christine Bisesi
8960 Rolling Hill Road
Holland, OH 43528

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, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/19/2006
Effective Date: 1/19/2006**

FINAL PERMIT TO INSTALL 03-16372

Application Number: 03-16372
Facility ID: 0387020404
Permit Fee: **\$1600**
Name of Facility: Dowa THT America, Inc.
Person to Contact: Christine Bisesi
Address: 8960 Rolling Hill Road
Holland, OH 43528

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2130 South Woodland Circle
Bowling Green, Ohio**

Description of proposed emissions unit(s):
(4) Nitriding Furnaces, (2) Gas generators, (2) carburizing, and (4) carbo nitriding furnace lines.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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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.

10. Public Disclosure

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

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NO _x	9.28
SO ₂	17.88
OC	11.56

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Nitriding Treatment Process (Nitriding Furnace #1)	OAC rule 3745-31-05(A)(3)	0.53 pound nitrogen oxides (NO _x) per hour; 2.32 tons NO _x per year
		0.66 pound organic compounds (OC) per hour; 2.89 tons OC per year
		1.02 pounds sulfur dioxide (SO ₂) per hour; 4.47 tons SO ₂ per year
		Visible particulate emissions (PE) shall not exceed 0 percent opacity, as a six-minute average (see A.2.a)
	OAC rule 3745-17-10(B)(1)	0.02 pounds PE per mmBtu of actual heat input (see A.2.a)
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-18-06	see A.2.c
	OAC rule 3745-23-06(B)	see A.2.d

2. Additional Terms and Conditions

Emissions Unit ID: P001

- 2.a The visible PE limitation and the pounds PE per mmBtu of actual heat input limitation apply to combustion emissions generated by the indirect heating of the furnace. PE generated directly by the nitriding treatment process are insignificant.
- 2.b 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.c This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).
- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (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 February 14, 2005, OAC rule 3745-23-06 was rescinded; 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 revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e The hourly emission limitations represents the potential to emit for this emissions unit. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

B. Operational Restrictions

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

C. Monitoring and/or Recordkeeping Requirements

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

D. Reporting Requirements

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

E. Testing Requirements

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

- a. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (1038 cu. ft./hr) by the appropriate emission factor from AP-42, Table 1.4-2 (revised 7/98) [1.9 lbs PE (filtrable)/mmcf.] and dividing by the maximum heat input capacity of the burner(s) (1.038 mmBtu/hr). If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:
1.02 pounds SO₂ per hour; 4.47 tons SO₂ per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- c. Emission Limitation:
0.53 pound NO_x per hour; 2.32 tons NO_x per year

Applicable Compliance Method:

Emissions Unit ID: **P001**

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- d. Emission Limitation:
 0.66 pound OC per hour, 2.89 tons OC year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- e. Emission Limitation:
 Visible particulate emissions shall not exceed 0 percent opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

F. Miscellaneous Requirements

None

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Dowa

PTI A

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Emissions Unit ID: **P001**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Nitriding Treatment Process (Nitriding Furnace #7)	OAC rule 3745-31-05(A)(3)	0.53 pound nitrogen oxides (NO _x) per hour; 2.32 tons NO _x per year
		0.66 pound organic compounds (OC) per hour; 2.89 tons OC per year
		1.02 pounds sulfur dioxide (SO ₂) per hour; 4.47 tons SO ₂ per year
		Visible particulate emissions (PE) shall not exceed 0 percent opacity, as a six-minute average (see A.2.a)
	OAC rule 3745-17-10(B)(1)	0.02 pounds PE per mmBtu of actual heat input (see A.2.a)
	OAC rule 3745-17-07(A)	see A.2.b
OAC rule 3745-18-06	see A.2.c	
OAC rule 3745-23-06(B)	see A.2.d	

2. Additional Terms and Conditions

- 2.a** The visible PE limitation and the pounds PE per mmBtu of actual heat input limitation apply to combustion emissions generated by the indirect heating of the furnace. PE generated directly by the nitriding treatment process are insignificant.
- 2.b** 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.c** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).
- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (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 February 14, 2005, OAC rule 3745-23-06 was rescinded; 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 revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** The hourly emission limitations represents the potential to emit for this emissions unit. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

B. Operational Restrictions

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

C. Monitoring and/or Record keeping Requirements

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

D. Reporting Requirements

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (1038 cu. ft./hr) by the appropriate emission factor from AP-42, Table 1.4-2 (revised 7/98) [1.9 lbs PE (filtrable)/mmcf.] and dividing by the maximum heat input capacity of the burner(s) (1.038 mmBtu/hr). If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

b. Emission Limitation:

1.02 pounds SO₂ per hour; 4.47 tons SO₂ per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

c. Emission Limitation:

0.53 pound NO_x per hour; 2.32 tons NO_x per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000

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Emissions Unit ID: P002

lbs/ton

- d. Emission Limitation:
0.66 pound OC per hour, 2.89 tons OC year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

e. Emission Limitation:

Visible particulate emissions shall not exceed 0 percent opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Nitriding Treatment Process (Nitriding Furnace #8)	OAC rule 3745-31-05(A)(3)	0.53 pound nitrogen oxides (NO _x) per hour; 2.32 tons NO _x per year
		0.66 pound organic compounds (OC) per hour; 2.89 tons OC per year
		1.02 pounds sulfur dioxide (SO ₂) per hour; 4.47 tons SO ₂ per year
		Visible particulate emissions (PE) shall not exceed 0 percent opacity, as a six-minute average (see A.2.a)
	OAC rule 3745-17-10(B)(1)	0.02 pounds PE per mmBtu of actual heat input (see A.2.a)
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-18-06	see A.2.c
	OAC rule 3745-23-06(B)	see A.2.d

2. Additional Terms and Conditions

- 2.a** The visible PE limitation and the pounds PE per mmBtu of actual heat input limitation apply to combustion emissions generated by the indirect heating of the furnace. PE generated directly by the nitriding treatment process are insignificant.
- 2.b** 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.c** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).
- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (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 February 14, 2005, OAC rule 3745-23-06 was rescinded; 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 revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** The hourly emission limitations represents the potential to emit for this emissions unit. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

B. Operational Restrictions

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

C. Monitoring and/or Record keeping 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.

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Emissions Unit ID: P003

D. Reporting Requirements

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (1038 cu. ft./hr) by the appropriate emission factor from AP-42, Table 1.4-2 (revised 7/98) [1.9 lbs PE (filtrable)/mmcf.] and dividing by the maximum heat input capacity of the burner(s) (1.038 mmBtu/hr). If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:
1.02 pounds SO₂ per hour; 4.47 tons SO₂ per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- c. Emission Limitation:
0.53 pound NO_x per hour; 2.32 tons NO_x per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000

lbs/ton

- d. Emission Limitation:
0.66 pound OC per hour, 2.89 tons OC year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

e. Emission Limitation:

Visible particulate emissions shall not exceed 0 percent opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Nitriding Treatment Process (Nitriding Furnace #10)	OAC rule 3745-31-05(A)(3)	0.53 pound nitrogen oxides (NO _x) per hour; 2.32 tons NO _x per year
		0.66 pound organic compounds (OC) per hour; 2.89 tons OC per year
		1.02 pounds sulfur dioxide (SO ₂) per hour; 4.47 tons SO ₂ per year
		Visible particulate emissions (PE) shall not exceed 0 percent opacity, as a six-minute average (see A.2.a)
	OAC rule 3745-17-10(B)(1)	0.02 pounds PE per mmBtu of actual heat input (see A.2.a)
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-18-06	see A.2.c
OAC rule 3745-23-06(B)	see A.2.d	

2. Additional Terms and Conditions

- 2.a** The visible PE limitation and the pounds PE per mmBtu of actual heat input limitation apply to combustion emissions generated by the indirect heating of the furnace. PE generated directly by the nitriding treatment process are insignificant.
- 2.b** 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.c** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).
- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (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 February 14, 2005, OAC rule 3745-23-06 was rescinded; 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 revisions to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** The hourly emission limitations represents the potential to emit for this emissions unit. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

B. Operational Restrictions

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

C. Monitoring and/or Record keeping Requirements

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

D. Reporting Requirements

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

E. Testing Requirements

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

- a. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (1038 cu. ft./hr) by the appropriate emission factor from AP-42, Table 1.4-2 (revised 7/98) [1.9 lbs PE (filtrable)/mmcf.] and dividing by the maximum heat input capacity of the burner(s) (1.038 mmBtu/hr). If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:
1.02 pounds SO₂ per hour; 4.47 tons SO₂ per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- c. Emission Limitation:
0.53 pound NO_x per hour; 2.32 tons NO_x per year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- d. Emission Limitation:
0.66 pound OC per hour, 2.89 tons OC year

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit* of the emissions unit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitations. If required, the permittee shall demonstrate compliance with the hourly limitation by emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

*The hourly potential to emit is based on based on stack testing data of a similar source. The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton

- e. Emission Limitation:
Visible particulate emissions shall not exceed 0 percent opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

F. Miscellaneous Requirements

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None