



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
Columbus, OH 43216-1049

**CERTIFIED MAIL**

**RE: FINAL PERMIT TO INSTALL  
WOOD COUNTY  
Application No: 03-17348  
Fac ID: 0387020404**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 1/15/2008**

Dowa THT America, Inc.  
Christine Bisesi  
1690 Woodlands Drive  
Maumee, OH 43537

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

CC: USEPA

NWDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 1/15/2008  
Effective Date: 1/15/2008**

**FINAL PERMIT TO INSTALL 03-17348**

Application Number: 03-17348  
Facility ID: 0387020404  
Permit Fee: **\$3200**  
Name of Facility: Dow Chemical Company, Inc.  
Person to Contact: Christine Bisesi  
Address: 1690 Woodlands Drive  
Maumee, OH 43537

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

Description of proposed emissions unit(s):  
**8 Nitriding furnaces.**

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

Chris Korleski  
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 (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. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources 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.

**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>
PE	11.19
NO <sub>x</sub>	4.47
CO	0.96
SO <sub>2</sub>	4.47
OC	2.89

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

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

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

#### **Operations, Property, and/or Equipment - (P014) - Carbo Nitriding Furnace Line No. 14**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

### **2. Additional Terms and Conditions**

- 2.a** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the uncontrolled potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:

0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

b. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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

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 - (P015) - Carburizing Furnace Line No. 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

### 2. Additional Terms and Conditions

**2.a** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).

**2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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

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 - (P016) - Carbo Nitriding Furnace Line No. 16

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

### 2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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**

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 - (P017) - Carbo Nitriding Furnace Line No. 17**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

### **2. Additional Terms and Conditions**

- 2.a** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule  
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**

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 - (P018) - Carbo Nitriding Furnace Line No. 18**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

**2. Additional Terms and Conditions**

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:

0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

b. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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**

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 - (P019) - Carburizing Furnace Line No. 6**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

**2. Additional Terms and Conditions**

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (1.038 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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**

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 - (P020) - Nitriding Furnace Line No. 12**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-18-06	See A.2.c.

**2. Additional Terms and Conditions**

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 2.89 tons per year of OC; determined by multiplying 0.66 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 2.32 tons per year of NO<sub>x</sub>; determined by multiplying 0.53 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.96 tons per year of CO; determined by multiplying 0.22 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 4.47 tons per year of SO<sub>2</sub>; determined by multiplying 1.02 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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

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 - (P021) - Carbo Nitriding Furnace Line No. 13

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See A.2.a and A.2.b
OAC rule 3745-17-10(C)(1)	0.4 lbs of PE per MMBtu of actual heat input
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06	See A.2.c

### 2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.4 pounds of particulate per million Btu of actual heat input under OAC rule 3745-17-10(C)(1).
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled OC, NO<sub>x</sub>, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for OC, NO<sub>x</sub>, CO and SO<sub>2</sub> is less than ten tons per year.

The annual emission rate for this emissions unit is 0.92 tons per year of OC; determined by multiplying 0.21 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.04 tons per year of NO<sub>x</sub>; determined by multiplying 0.01 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.83 tons per year of CO; determined by multiplying 0.19 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

The annual emission rate for this emissions unit is 0.13 tons per year of SO<sub>2</sub>; determined by multiplying 0.03 pounds per hour by 8760 hours per year and dividing by 2000 pounds per ton.

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

**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:  
0.40 lbs 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 (0.89 MMBtu/hr) by the emission limitation. If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(9).

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average except as provided by the rule

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















