

Facility ID: 1318182623 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit B001](#)
- [Go to Part II for Emissions Unit B004](#)
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Facility ID: 1318182623 Emissions Unit ID: B001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
25.0 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions per mmBtu actual heat input

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. The permittee shall only burn 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 a deviation (excursion) report to the Cleveland Division of Air Quality (CDAQ) that identifies each day when a fuel other than natural gas is burned, giving a reason why natural gas was unavailable. Each report shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):  
 Emission Limitation:  
 Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:  
 If required, compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).  
 Emission Limitation:  
 0.020 lb of particulate emissions per mmBtu actual heat input

Applicable Compliance Method:  
 For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.025 mmcu.ft/hr) by the AP-42 emission factor\* for natural gas (7.6 lbs particulate/mmcu.ft), and dividing by the maximum hourly heat input capacity of the emissions unit (25.0 mmBtu/hr).

\*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1318182623 Emissions Unit ID: B004 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
29.4 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions per mmBtu actual heat input

**2. Additional Terms and Conditions**

- (a) None

**B. Operational Restrictions**

- 1. The permittee shall only burn 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 a deviation (excursion) report to the Cleveland Division of Air Quality (CDAQ) that identifies each day when a fuel other than natural gas is burned, giving a reason why natural gas was unavailable. Each report shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

- 1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):  
 Emission Limitation:  
 Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:  
 If required, compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).  
 Emission Limitation:  
 0.020 lb of particulate emissions per mmBtu actual heat input

Applicable Compliance Method:  
 For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0294 mmcu.ft/hr) by the AP-42 emission factor\* for natural gas (7.6 lbs particulate/mmcu.ft), and dividing by the maximum hourly heat input capacity of the emissions unit (29.4 mmBtu/hr).

\*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1318182623 Emissions Unit ID: B007 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor Power International 16.75 mmBtu/hr natural gas-fired boiler (Company ID Boiler No. 2)	OAC rule 3745-31-05(A)(3) (PTI#1304193 issued September 9, 2003)	Particulate emissions (PE) shall not exceed 1.47 tpy.
		Nitrogen oxide (NOx) emissions shall not exceed 1.68 lbs/hr and 7.36 tpy.
		Carbon monoxide (CO) emissions shall not exceed 1.41 lbs/hr and 6.18 tpy.
		Organic compound (OC) emissions shall not exceed 0.18 lb/hr and 0.79 tpy.
		Sulfur dioxide (SO2) emissions shall not exceed 0.01 lb/hr and 0.04 tpy.
		The requirements established pursuant to this rule also include the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.	
40 CFR 60 Subpart Dc	See section A.2.a below.	

- 2. **Additional Terms and Conditions**
  - (a) This emissions unit is not subject to the limits specified in 40 CFR 60, Subpart Dc when combusting natural gas for fuel.

**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 in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

**D. Reporting Requirements**

- 1. The permittee shall submit a deviation (excursion) report to the Cleveland Division of Air Quality (CDAQ) that identifies each day when a fuel other than natural gas is burned, giving a reason why natural gas was unavailable. Each report shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
- Emission Limitation:  
1.47 TPY of particulate emissions (PE)
- Applicable Compliance Method:  
Compliance shall be based upon the following calculations:
- $$(16.75 \text{ mmBtu/hr}) \times (0.020 \text{ lb PE/mmBtu}) = 0.335 \text{ lb PE/hr}$$
- $$(0.335 \text{ lb PE/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lb}) = 1.47 \text{ TPY PE}$$
- where:
- 16.75 mmBtu/hr = maximum heat input of the boiler  
0.020 lb PE/mmBtu = from OAC rule 3745-17-10(B)(1)
- Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the allowable particulate limit of 0.020 lb PE/mmBtu.
- Emission Limitation:  
1.68 lbs/hr NOx emissions
- Applicable Compliance Method:  
To determine compliance use the emissions factor (EF) for NOx, 100 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:
- $$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1 \text{ ft}^3/1000 \text{ Btu}) = 1.68 \text{ lbs NOx/hr}$$
- If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.
- Emission Limitation:  
7.36 tpy NOx emissions
- Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.
- Emission Limitation:  
1.41 lbs/hr CO emissions
- Applicable Compliance Method:  
To determine compliance use the emission factor (EF) for CO, 35.0 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:
- $$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1 \text{ ft}^3/1000 \text{ Btu}) = 1.41 \text{ lbs CO/hr}$$
- If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.
- Emission Limitation:  
6.18 tpy CO emissions
- Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.
- Emission Limitation:  
0.18 lb/hr OC emissions
- Applicable Compliance Method:  
To determine compliance use the emission factor (EF) for OC, 11.0 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:
- $$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1 \text{ ft}^3/1000 \text{ Btu}) = 0.18 \text{ lb OC/hr}$$
- Emission Limitation:  
0.79 tpy OC emissions
- Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.
- Emission Limitation:  
0.01 lb/hr SO<sub>2</sub> emissions
- Applicable Compliance Method:  
To determine compliance use the emission factor (EF) for SO<sub>2</sub>, 0.6 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:
- $$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1 \text{ ft}^3/1000 \text{ Btu}) = 0.01 \text{ lb SO}_2/\text{hr}$$
- Emission Limitation:  
0.04 tpy SO<sub>2</sub> emissions
- Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of

operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures in OAC rule 3745-17-03(B)(1).

Emission Limitation:

0.020 lb/mmBtu of particulate emissions

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum fuel usage rate per hour (16,750 ft3/hr) by the emission factor for PE (7.6 lbs/mmft3, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98) and dividing by the maximum rated heat input capacity of the emissions unit (16.75 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1318182623 Emissions Unit ID: B008 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Vapor Power International 16.75 mmBtu/hr natural gas-fired boiler (Company ID Boiler No. 3)	OAC rule 3745-31-05(A)(3) (PTI#1304193 issued September 9, 2003)	Particulate emissions (PE) shall not exceed 1.47 tpy.  Nitrogen oxide (NOx) emissions shall not exceed 1.68 lbs/hr and 7.36 tpy.
		Carbon monoxide (CO) emissions shall not exceed 1.41 lbs/hr and 6.18 tpy.
		Organic compound (OC) emissions shall not exceed 0.18 lb/hr and 0.79 tpy.
		Sulfur dioxide (SO2) emissions shall not exceed 0.01 lb/hr and 0.04 tpy.
	OAC rule 3745-17-07(A)	The requirements established pursuant to this rule also include the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.
	40 CFR 60 Subpart Dc	See section A.2.a below.

- 2. **Additional Terms and Conditions**

- (a) This emissions unit is not subject to the limits specified in 40 CFR 60, Subpart Dc when combusting natural gas for fuel.

**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 in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

**D. Reporting Requirements**

1. The permittee shall submit a deviation (excursion) report to the Cleveland Division of Air Quality (CDAQ) that identifies each day when a fuel other than natural gas is burned, giving a reason why natural gas was unavailable. Each report shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

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

Emission Limitation:  
1.47 TPY of particulate emissions (PE)

Applicable Compliance Method:  
Compliance shall be based upon the following calculations:

$$(16.75 \text{ mmBtu/hr}) \times (0.020 \text{ lb PE/mmBtu}) = 0.335 \text{ lb PE/hr}$$

$$(0.335 \text{ lb PE/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lb}) = 1.47 \text{ TPY PE}$$

where:

16.75 mmBtu/hr = maximum heat input of the boiler  
0.020 lb PE/mmBtu = from OAC rule 3745-17-10(B)(1)

Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the allowable particulate limit of 0.020 lb PE/mmBtu.

Emission Limitation:  
1.68 lbs/hr NOx emissions

Applicable Compliance Method:  
To determine compliance use the emissions factor (EF) for NOx, 100 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:

$$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1 \text{ ft}^3/1000 \text{ Btu}) = 1.68 \text{ lbs NOx/hr}$$

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

Emission Limitation:  
7.36 tpy NOx emissions

Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Emission Limitation:  
1.41 lbs/hr CO emissions

Applicable Compliance Method:  
To determine compliance use the emission factor (EF) for CO, 35.0 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:

$$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1\text{ft}^3/1000 \text{ Btu}) = 1.41 \text{ lbs CO/hr}$$

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

Emission Limitation:  
6.18 tpy CO emissions

Applicable Compliance Method:  
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Emission Limitation:  
0.18 lb/hr OC emissions

Applicable Compliance Method:  
To determine compliance use the emission factor (EF) for OC, 11.0 lbs/mmft<sup>3</sup>, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:

$$(\text{Boiler Heat Input mmBtu/hr}) \times (\text{EF}) \times (1\text{ft}^3/1000 \text{ Btu}) = 0.18 \text{ lb OC/hr}$$

Emission Limitation:  
0.79 tpy OC emissions

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Emission Limitation:  
0.01 lb/hr SO2 emissions

**Applicable Compliance Method:**

To determine compliance use the emission factor (EF) for SO2, 0.6 lbs/mmft3, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98 in the following equation:

$$(Boiler\ Heat\ Input\ mmBtu/hr) \times (EF) \times (1ft^3/1000\ Btu) = 0.01\ lb\ SO2/hr$$

Emission Limitation:  
0.04 tpy SO2 emissions

**Applicable Compliance Method:**

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Emission Limitation:  
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average.

**Applicable Compliance Method:**

If required, compliance shall be determined through visible emission observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures in OAC rule 3745-17-03(B)(1).

Emission Limitation:  
0.020 lb/mmBtu of particulate emissions

**Applicable Compliance Method:**

Compliance may be determined by multiplying the maximum fuel usage rate per hour (16,750 ft3/hr) by the emission factor for PE (7.6 lbs/mmft3, taken from U.S. EPA AP-42 "Compilation of Air Pollutant Emission Factors," Section 1.4, Natural Gas Combustion, 7/98) and dividing by the maximum rated heat input capacity of the emissions unit (16.75 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

**F. Miscellaneous Requirements**

1. None

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**Facility ID: 1318182623 Emissions Unit ID: P004 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
A product development machine shop which includes surface grinders, buffer, glass bead blaster, injection mold machines, lathes, mills, sanders, dryers etc. Particulate emissions are controlled by a dust collector. Company ID is Product Developemnt Shop.	OAC rule 3745-31-05(A)(3)(PTI# 1302400 issued October 6, 1993)  OAC rule 3745-17-07(A)	1.03 lb/hr of particulate emissions and 4.51 TPY  Visible particulate emissions shall not exceed 5% opacity as a six-minute average.  The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-17-11(B)

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

2. **Additional Terms and Conditions**

(a) None

B. **Operational Restrictions**

1. The pressure drop across the dust collector shall be maintained within the range of 1.0 to 8.0 inches of water while the emissions unit is in operation.

C. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the dust collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the dust collector on a daily basis.

D. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland DAQ that identify all periods of time during which the pressure drop across the dust collector did not comply with the allowable range specified above.

E. **Testing Requirements**

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

Emission Limitation:

1.03 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance may be determined by multiplying an assumed PE grain loading emission factor of 0.03 gr/dscf from the dust collector outlet by the dust collector's rated exhaust flow rate of 4000 dscf/min, multiplying by 60 min/hr and dividing by 7000 grains/lb.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

Emission Limitation:

4.51 TPY of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

Emission Limitation:

Visible particulate emissions shall not exceed 5% opacity from any stack.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. **Miscellaneous Requirements**

1. None