

Facility ID: 0679000286 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.

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Facility ID: 0679000286 Emissions Unit ID: P001 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>
610 HP Natural Gas Fired Engine	OAC 3745-31-05(A)(3) (PTI #06-5605)	Emissions of particulate matter (PM) shall not exceed 0.062 lb/mm Btu of actual heat input; 0.30 lb/hr at maximum operating rate and 1.3 tpy. Emissions of Nitrogen oxides (NOx) shall not exceed: 6.7 lbs/hr; 29.5 tpy
	OAC 3745-17-11(B)(5)(a)	Emissions of Carbon monoxide (CO) shall not exceed 4.0 lbs/hr; 17.7 tpy.
	OAC 3745-17-07	Emissions of volatile organic compound (VOC) shall not exceed: 2.7 lbs/hr; 11.8 tpy. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

- (a) None

B. Operational Restrictions

1. The permittee shall burn only natural gas in these emissions units.

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 the fuel burned in these emissions units.

D. Reporting Requirements

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

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:

0.30 lb PM/hr

Applicable Compliance Method:

Compliance with the PM limits is demonstrated by multiplying the BTU value of the maximum hourly gas burning capacity of the emission unit by the emission factor from OAC 3745-17-11(B)(5) for small stationary internal combustion engines. Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04 (A).

P001: $(0.062 \text{ lbs PM/mmbtu})(4.8 \text{ mmbtu/hr}) = 0.30 \text{ lbs PM/hr}$
Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

Emission Limitation:

6.7 lbs/hr of NO_x

Applicable Compliance Method:

Compliance with the nitrogen oxide emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

$(0.01101 \text{ lbs NO}_x/\text{hp-hr})(610 \text{ hp}) = 6.72 \text{ lbs NO}_x/\text{hr}$
Emission Limitation:

4.0 lbs/hr of CO

Applicable Compliance Method:

Compliance with the carbon monoxide emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P001: $(0.00661 \text{ lbs CO}/\text{hp-hr})(610 \text{ hp}) = 4.03 \text{ lbs CO/hr}$
Emission Limitation:

2.7 lbs/hr of VOC

Applicable Compliance Method:

Compliance with the volatile organic compound emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P001: $(0.00441 \text{ lbs VOC}/\text{hp-hr})(610 \text{ hp}) = 2.69 \text{ lbs VOC/hr}$
Emission Limitations:

1.3 tpy of PM
4.0 tpy of CO
29.5 tpy of NO_x
2.7 tpy of OC

Applicable Compliance Method:

Compliance with the annual emission limits shall be based upon multiplying the appropriate allowable hourly emission rate by the maximum annual hours of operation of 8,760 hours, and then dividing by 2,000 lbs/ton. Compliance with these emission limitations can be assumed provided the permittee complies with the hourly emission limitations.

F. Miscellaneous Requirements

1. None

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Facility ID: 0679000286 Emissions Unit ID: P002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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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>
225 HP Natural Gas Fired Engine	OAC 3745-31-05 (PTI #06-5605)	Emissions of particulate matter PM shall not 0.60 lb/hr at maximum operating rate and 2.6 tpy. Nitrogen oxides (NOx) emissions shall not exceed: 6.4 lbs/hr; 28.0 tpy. Carbon monoxide (CO) emissions shall not exceed 6.8 lbs/hr; 29.7 tpy.
	OAC 3745-17-11(B)(5)(a)	volatile organic compound (VOC) emissions shall not exceed: 0.9 lb/hr; 3.9 tpy. Emissions of PM shall not exceed 0.310 lb/mmBtu of actual heat input.
	OAC 3745-17-07	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

2. Additional Terms and Conditions

(a) None

B. Operational Restrictions

1. The permittee shall burn only natural gas in these emissions units.

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 the fuel burned in these emissions units.

D. Reporting Requirements

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

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:

0.59 lb PM/hr

Applicable Compliance Method:

Compliance with the particulate emission limits is demonstrated by multiplying the BTU value of the maximum hourly gas burning capacity of the emission unit by the AP-42 emission factor (1992 revision) for diesel fuel (0.31 lb/MMBtu). Note: There is no emission factor for burning natural gas but it is assumed to burn at least as clean as diesel fuel. Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

P002: (0.31 lbs PM/mmbtu)(1.89 mmbtu/hr) = 0.59 lbs PM/hr
Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).
Emission Limitation:

6.4 lbs/hr of NOx

Applicable Compliance Method:

Compliance with the NOx emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P002: (0.02841 lbs NOx/hp-hr)(225 hp) = 6.39 lbs NOx/hr
Emission Limitation:

6.8 lbs/hr of CO

Applicable Compliance Method:

Compliance with the CO emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P002: (0.03018 lbs CO/hp-hr)(225 hp) = 6.79 lbs CO/hr
Emission Limitation:

0.89 lb VOC/hr

Applicable Compliance Method:

Compliance with the volatile organic compound emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P002: (0.00396 lb VOC/hp-hr)(225 hp) = 0.89 lbs VOC/hr
Emission Limitations:

2.6 tpy of PM
29.7 tpy of CO
28.0 tpy of NOx
3.9 tpy of OC

Applicable Compliance Method:

Compliance with the annual emission limits shall be based upon multiplying the appropriate allowable hourly emission rate by the maximum annual hours of operation of 8,760 hours, and then dividing by 2,000 lbs/ton. Compliance with these emission limitations can be assumed provided the permittee complies with the hourly emission limitations.

F. Miscellaneous Requirements

1. None

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Facility ID: 0679000286 Emissions Unit ID: P003 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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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>
360 HP Natural Gas Fired Engine	OAC 3745-31-05 (PTI #06-5605)	Emissions of particulate matter (PM) shall not exceed 0.9 lb/hr; 3.9 tpy. Nitrogen oxides (NOx) emissions shall not exceed: 9.4 pounds/hour; 41.0 tons/year. Carbon monoxide (CO) emissions shall not exceed 1.3 lbs/hr; 5.6 tpy.
	OAC 3745-17-11(B)(5)(a)	Volatile organic compound (VOC) emissions shall not exceed 0.6 lb/hr; 2.5 tpy. Emissions of PM shall not exceed: 0.310 pound/million Btu of actual heat input.
	OAC 3745-17-07	Visible particulate emissions shall not exceed 20%

opacity, as a 6-minute average, except as provided by rule.

- 2. **Additional Terms and Conditions**
 - (a) None
- B. **Operational Restrictions**
 - 1. The permittee shall burn only natural gas in these emissions units.
- 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 the fuel burned in these emissions units.
- D. **Reporting Requirements**
 - 1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in these emissions units. Each report shall be submitted within 30 days after the deviation occurs.
- 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:

0.89 lbs PE/hr

Applicable Compliance Method:

Compliance with the particulate emission limits is demonstrated by multiplying the BTU value of the maximum hourly gas burning capacity of the emission unit by the AP-42 emission factor (1992 revision) for diesel fuel (0.31 lb/MMBtu). Note: There is no emission factor for burning natural gas but it is assumed to burn at least as clean as diesel fuel. Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

P003: $(0.31 \text{ lbs PM/mmbtu})(2.88 \text{ mmbtu/hr}) = 0.89 \text{ lbs PM/hr}$
Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible PE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).
Emission Limitation:

9.36 lbs NOx/hr

Applicable Compliance Method:

Compliance with the NOx emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P003: $(0.02600 \text{ lbs NOx/hp-hr})(360 \text{ hp}) = 9.36 \text{ lbs NOx/hr}$
Emission Limitation:

1.27 lbs CO/hr

Applicable Compliance Method:

Compliance with the CO emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P003: $(0.00353 \text{ lbs CO/hp-hr})(360 \text{ hp}) = 1.27 \text{ lbs CO/hr}$
Emission Limitation:

0.57 lbs VOC/hr

Applicable Compliance Method:

Compliance with the VOC emission limit shall be based upon multiplying the maximum horsepower of the emission unit by the manufacturer's emission factor:

P003: $(0.00159 \text{ lbs VOC/hp-hr})(360 \text{ hp}) = 0.57 \text{ lbs VOC/hr}$
Emission Limitations:

3.9 tpy of PM
5.6 tpy of CO
41.0 tpy of NOx
2.5 tpy of OC

Applicable Compliance Method:

Compliance with the annual emission limits shall be based upon multiplying the appropriate allowable hourly emission rate by the maximum annual hours of operation of 8,760 hours, and then dividing by 2,000 lbs/ton. Compliance with these emission limitations can be assumed provided the permittee complies with the hourly emission limitations.

F. **Miscellaneous Requirements**

1. None