

Facility ID: 0228000333 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.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0228000333 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

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 630 bhp natural gas-fired reciprocating internal combustion 4-stroke lean-burn engine.	OAC rule 3745-17-07 (A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-17-11 (B)(5)(b)	Particulate emissions from this emissions unit shall not exceed 0.062 pound per million BTU actual heat input.
	OAC rule 3745-31-05 (A)(3) PTI No. 02-22491	Nitrogen oxides (NOX) emissions from this emissions unit shall not exceed 2.78 pounds per hour and 12.18 tons per year.
		Carbon monoxide (CO) emissions from this emissions unit shall not exceed 2.50 pounds per hour and 10.95 tons per year.
		Total organic compound (OC) emissions from this emissions unit shall not exceed 7.64 pounds per hour and 33.48 tons per year.
		Particulate emissions from this emissions unit shall not exceed 1.41 tons per year.
		There shall be no visible particulate emissions from any stack associated with this emissions unit.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11.

2. Additional Terms and Conditions

- (a) None

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall only burn natural gas in this emissions unit.
2. For each day during which the permittee burns a fuel other than natural gas, a record shall be maintained for the type and quantity of the fuel burned in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion reports that identify each day during which a fuel other than natural gas was burned in this emissions unit, and the amount of fuel were burned for each of such day.

E. Testing Requirements

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

a. Emission Limitation: 2.78 lbs/hr of NOX

Applicable Compliance Method:

Compliance shall be determined in accordance with the following:

$$ENOX = (MHI)(EFNOx)$$

where,

MHI = the maximum heat input of this emissions unit = 5.2 MM btu/hr; and

EFNOx = 2.0 g/hp-hr, the emission factor, from the equipment manufacturer provided by Dominion East Ohio.

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 7. Alternative U.S. EPA-approved test methods may be used with prior written approval from Ohio EPA.

b. Emission Limitation: 2.50 lbs/hr of CO

Applicable Compliance Method:

Compliance shall be determined in accordance with the following:

$$ECO = (MHI)(EFCO)$$

where,

MHI = the maximum heat input of this emissions unit = 5.2 MM btu/hr; and

EFCO = 1.8 g/hp-hr, the emission factor, from the equipment manufacturer provided by Dominion East Ohio.

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and 10, 10A, or 10B. Alternative U.S. EPA-approved test methods may be used with prior written approval from Ohio EPA.

c. Emission Limitation: 7.64 lbs/hr of OC

Applicable Compliance Method:

Compliance shall be determined in accordance with the following:

$$EOC = (MHI)(EFOC)$$

where,

MHI = the maximum heat input of this emissions unit = 5.2 MM btu/hr; and

EFOC = the emission factor = 1.47 lbs/MM btu heat input, AP - 42 "Compilation of Air Pollutant Emission Factors", July 2000, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-2, " Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines".

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and 18, or 25/25A. Alternative U.S. EPA-approved test methods may be used with prior written approval from Ohio EPA.

d. Emission Limitation: Particulate emissions shall not exceed 0.062 lb/MM btu of actual heat input

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.011 lbs/MM btu actual heat input. This emission factor is specified in the U.S. EPA reference document, AP - 42 "Compilation of Air Pollutant Emission Factors", July 2000, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-2, " Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines".

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA-approved test methods may be used with prior written approval from Ohio EPA.

e. Emission Limitation:

12.18 tons per year of NOX;

10.95 tons per year of CO; and

33.48 tons per year of TOC

Applicable Compliance Method:

The tons per year limitations were developed by multiplying the pound per hour limitations by the maximum operating schedule of 8,760 hours per year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

f. Emission Limitation: 1.41 tons/yr of particulate

Applicable Compliance Method

The tons per year limitation was developed by multiplying the pound per million BTU actual heat input limitation by the maximum heat input of 5.2 million BTU per hour and the maximum operating schedule of 8,760 hours per year, then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the pound per million BTU actual heat input, compliance will also be shown with the annual limitations.

g. Emission Limitation: 0% opacity

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the test methods and procedures specified in U.S. EPA Reference Method 9.

F. Miscellaneous Requirements

1. None