

Facility ID: 1652050104 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 B002](#)

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

Facility ID: 1652050104 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>
Natural Gas Stand-By Generator Unit #1 - (1,468 BHP, 9.963 mmBTU/hr) Jenbacher Model JMS320	OAC rule 3745-31-05(A)(3) (PTI 16-02076)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(5)(b). 0.062 lb particulates per mmBtu actual heat input 1.45 tpy particulates 3.66 lbs/hr nitrogen oxides (NOx) 16.0 tpy NOx 10.7 lb/hr carbon monoxide (CO) 46.9 tpy CO 1.04 lb/hr volatile organic compounds (VOC) 4.54 tpy VOC 10% opacity as a 6-minute average (stack emissions) See A.2.a - A.2.b below. See A.2.c below. See A.2.d below.
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)(5)(b)	

2. Additional Terms and Conditions

- (a) The permittee shall only burn natural gas in this emissions unit. The natural gas generator shall be equipped with low NOx combustion control module, turbocharger, and aftercooler to minimize NOx emissions. The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of fuel consumption and hours of operation for this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation reports in accordance with General Condition A.2 of this permit.

E. Testing Requirements

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

0.062 lb particulates per mmBtu actual heat input
1.45 tpy particulates

Applicable Compliance Method:

Compliance shall be based upon an AP-42 (7/98) Table 1.4-2 emission factor of 1.9 lbs particulate per 106 scf.

$(1.9 \text{ lb} / 106 \text{ scf}) * (106 \text{ scf} / 1020 \text{ mmBTU}) = 0.0019 \text{ lb particulates per mmBtu}$

$(1.9 \text{ lb} / 106 \text{ scf}) * (0.173248 \text{ } 106 \text{ scf} / \text{hr}) = 0.33 \text{ lb} / \text{hr}$

$(0.33 \text{ lb/hr}) * (8,760 \text{ hr/yr}) * (\text{ton}/2000\text{lbs}) = 1.45 \text{ tpy particulates}$

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B) (10) and 40 CFR Part 60, Appendix A, Methods 1 through 5.

Emission Limitation:

10.7 lbs/hr carbon monoxide (CO)
46.8 tpy CO

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 3.3 g/hp-hr.

$(3.3 \text{ g/hp-hr}) * (1,468 \text{ HP}) * (2.2046 \text{ lb}/1000\text{g}) = 10.7 \text{ lbs/hr}$

$(10.7 \text{ lbs/hr}) * (8,760\text{hr/yr}) * (\text{ton}/2000\text{lbs}) = 46.9 \text{ tpy}$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

Emission Limitation:

3.66 lbs/hr nitrogen oxides (NOx)
16.0 tpy NOx

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 1.13 g/hp-hr.

$(1.13 \text{ g/hp-hr}) * (1,468\text{HP}) * (2.2046 \text{ lb}/1000\text{g}) = 3.66 \text{ lbs/hr}$

$(3.66 \text{ lbs/hr}) * (8,760\text{hr/yr}) * (\text{ton}/2000\text{lbs}) = 16.0 \text{ tpy}$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

Emission Limitation:

1.04 lbs/hr volatile organic compounds (VOC)
4.54 tpy VOC

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.32 g/hp-hr.

$(0.32 \text{ g/hp-hr}) * (1,468\text{HP}) * (2.2046 \text{ lb}/1000\text{g}) = 1.04 \text{ lbs/hr}$

$(1.04 \text{ lbs/hr}) * (8,760\text{hr/yr}) * (\text{ton}/2000\text{lbs}) = 4.54 \text{ tpy}$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

Emission Limitation:

10% opacity as a 6-minute average
(stack emissions)

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

1. None

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Facility ID: 1652050104 Emissions Unit ID: B002 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>
Natural Gas Stand-By Generator Unit #2 - (1,468 BHP, 9.963 mmBTU/hr) Jenbacher Model JMS320	OAC rule 3745-31-05(A)(3) (PTI 16-02076)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(5)(b). 0.062 lb particulates per mmBtu actual heat input 1.45 tpy particulates 3.66 lbs/hr nitrogen oxides (NOx) 16.0 tpy NOx 10.7 lb/hr carbon monoxide (CO) 46.9 tpy CO 1.04 lb/hr volatile organic compounds (VOC) 4.54 tpy VOC 10% opacity as a 6-minute average (stack emissions) See A.2.a - A.2.b below. See A.2.c below. See A.2.d below.
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)(5)(b)	

2. **Additional Terms and Conditions**
 - (a) The permittee shall only burn natural gas in this emissions unit. The natural gas generator shall be equipped with low NOx combustion control module, turbocharger, and aftercooler to minimize NOx emissions. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of fuel consumption and hours of operation for this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation reports in accordance with General Condition A.2 of this permit.

E. Testing Requirements

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

0.062 lb particulates per mmBtu actual heat input

1.45 tpy particulates

Applicable Compliance Method:

Compliance shall be based upon an AP-42 (7/98) Table 1.4-2 emission factor of 1.9 lbs particulate per 106 scf.

$$(1.9 \text{ lb} / 106 \text{ scf}) * (106 \text{ scf} / 1020 \text{ mmBTU}) = 0.0019 \text{ lb particulates per mmBtu}$$

$$(1.9 \text{ lb} / 106 \text{ scf}) * (0.173248 \text{ 106 scf} / \text{hr}) = 0.33 \text{ lb} / \text{hr}$$

$$(0.33 \text{ lb/hr}) * (8,760 \text{ hr/yr}) * (\text{ton}/2000\text{lbs}) = 1.45 \text{ tpy particulates}$$

If required, the permittee shall demonstrate compliance by testing in accordance with OAC rule 3745-17-03(B)(10) and 40 CFR Part 60, Appendix A, Methods 1 through 5.

Emission Limitation:

10.7 lbs/hr carbon monoxide (CO)

46.8 tpy CO

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 3.3 g/hp-hr.

$$(3.3 \text{ g/hp-hr}) * (1,468 \text{ HP}) * (2.2046 \text{ lb}/1000\text{g}) = 10.7 \text{ lbs/hr}$$

$$(10.7 \text{ lbs/hr}) * (8,760 \text{ hr/yr}) * (\text{ton}/2000\text{lbs}) = 46.9 \text{ tpy}$$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

Emission Limitation:

3.66 lbs/hr nitrogen oxides (NOx)

16.0 tpy NOx

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 1.13 g/hp-hr.

$$(1.13 \text{ g/hp-hr}) * (1,468 \text{ HP}) * (2.2046 \text{ lb}/1000\text{g}) = 3.66 \text{ lbs/hr}$$

$$(3.66 \text{ lbs/hr}) * (8,760 \text{ hr/yr}) * (\text{ton}/2000\text{lbs}) = 16.0 \text{ tpy}$$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

Emission Limitation:

1.04 lbs/hr volatile organic compounds (VOC)

4.54 tpy VOC

Applicable Compliance Method:

Compliance shall be based upon an emission factor supplied by the manufacturer of 0.32 g/hp-hr.

$$(0.32 \text{ g/hp-hr}) * (1,468 \text{ HP}) * (2.2046 \text{ lb}/1000\text{g}) = 1.04 \text{ lbs/hr}$$

$$(1.04 \text{ lbs/hr}) * (8,760 \text{ hr/yr}) * (\text{ton}/2000\text{lbs}) = 4.54 \text{ tpy}$$

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

Emission Limitation:

10% opacity as a 6-minute average

(stack emissions)

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

F. **Miscellaneous Requirements**

1. None