

Facility ID: 1431361666 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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[Go to Part II for Emissions Unit P034](#)

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Facility ID: 1431361666 Emissions Unit ID: P033 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>
P033 - Coffee roaster with thermal afterburner	OAC rule 3745-31-05(A)(3) (PTI 14-05423)	Particulate emissions (PE) and particulate matter emissions 10 microns and less (PM10) shall not exceed 0.20 pound per hour and 0.88 ton per year.  Carbon monoxide emissions (CO) shall not exceed 0.34 pound per hour and 1.49 ton per year.  Nitrogen oxides emissions (NOX) shall not exceed 0.22 pound per hour and 0.96 ton per year.  Sulfur dioxide emissions (SO2) shall not exceed 0.15 pound per hour and 0.66 ton per year.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	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 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

2. **Additional Terms and Conditions**
  - (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, the use of a thermal oxidizer and the visible particulate emissions limitation. The hourly emissions limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

**B. Operational Restrictions**

1. The average temperature of the exhaust gases of the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1400 degrees Fahrenheit.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and

maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases of the thermal oxidizer was less than 1400 degrees Fahrenheit.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall record the total operating time or production rate of the emissions unit on a monthly basis to determine actual emissions.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified in term B.1. The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

**E. Testing Requirements**

1. Compliance with the visible particulate limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

2. Emission Limitations:  
0.20 lb PE/PM10/hr and 0.88 TPY PE/PM10

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 2.48 lbs PE/PM10/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 85% efficiency rate of the oxidizer and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly PE/PM10 emissions by the operating hours then by 1 Ton/2000 pounds.

3. Emission Limitations:  
0.34 lb CO/hr and 1.49 TPY CO

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 12.6 lbs CO/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 95% efficiency rate of the oxidizer and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly CO emissions by the operating hours then by 1 Ton/2000 pounds.

4. Emission Limitations:  
0.22 lb NOx/hr and 0.96 TPY NOx

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 0.4 lb NOx/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly NOx emissions by the operating hours then by 1 Ton/2000 pounds.

5. Emission Limitations:  
0.15 lb SO2/hr and 0.66 TPY SO2

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 0.27 lb SO2/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly SO2 emissions by the operating hours then by 1 Ton/2000 pounds.

6. Emission Limitations:  
0.14 lb VOC/hr and 0.61 TPY VOC

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 5.04 lbs VOC/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 95% efficiency rate of the oxidizer and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly VOC emissions by the operating hours then by 1 Ton/2000 pounds.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1431361666 Emissions Unit ID: P034 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>
P034 - Coffee roaster with catalytic afterburner	OAC rule 3745-31-05(A)(3) (PTI 14-05423)	Particulate emissions (PE) and particulate matter emissions 10 microns and less (PM10) shall not exceed 0.04 pound per hour and 0.18 ton per year.  Carbon monoxide emissions (CO) shall not exceed 0.07 pound per hour and 0.31 ton per year.  Nitrogen oxides emissions (NOX) shall not exceed 0.04 pound per hour and 0.18 ton per year.  Sulfur dioxide emissions (SO2) shall not exceed 0.03 pound per hour and 0.13 ton per year.  Volatile organic compound emissions (VOC) shall not exceed 0.03 pound per hour and 0.13 ton per year.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	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 3745-18-06(C)	Exempt

2. **Additional Terms and Conditions**
  - (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, the use of a catalytic oxidizer and the visible particulate emissions limitation. The hourly emissions limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

**B. Operational Restrictions**

1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 700 degrees Fahrenheit.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature immediately before the catalyst bed for the catalytic oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 700 degrees Fahrenheit.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall record the total operating time or production rate of the emissions unit on a monthly basis to determine actual emissions.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the catalytic oxidizer did not comply with the temperature limitation specified in term B.1. The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

**E. Testing Requirements**

1. Compliance with the visible particulate limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

2. Emission Limitations:  
0.04 lb PE/PM10/hr and 0.18 TPY PE/PM10

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 2.48 lbs PE/PM10/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 85% efficiency rate of the oxidizer and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly PE/PM10 emissions by the operating hours then by 1 Ton/2000 pounds.

3. Emission Limitations:  
0.07 lb CO/hr and 0.31 TPY CO

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 12.6 lbs CO/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 95% efficiency rate of the oxidizer and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly CO emissions by the operating hours then by 1 Ton/2000 pounds.

4. Emission Limitations:  
0.04 lb NOx/hr and 0.18 TPY NOx

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 0.4 lb NOx/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly NOx emissions by the operating hours then by 1 Ton/2000 pounds.

5. Emission Limitations:  
0.03 lb SO2/hr and 0.13 TPY SO2

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 0.27 lb SO2/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly SO2 emissions by the operating hours then by 1 Ton/2000 pounds.

6. Emission Limitations:  
0.03 lb VOC/hr and 0.13 TPY VOC

Applicable compliance method:

Compliance with the hourly emission limit may be determined by multiplying the emission factor of 5.04 lbs VOC/ton of coffee (provided by facility stack test) by the batch size of the roaster and then by the 95% efficiency rate of the afterburner and then by 1 Ton/2000 pounds.

Compliance with the annual emission limit may be determined by multiplying calculated hourly VOC emissions by the operating hours then by 1 Ton/2000 pounds.

**F. Miscellaneous Requirements**

1. None