



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

5/20/2013

MICHAEL ZWAYER
EMERSON CLIMATE TECHNOLOGIES, INC.
1675 CAMPBELL RD
SIDNEY, OH 45365

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0575010139
Permit Number: P0114450
Permit Type: Renewal
County: Shelby

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Southwest District Office at (937)285-6357 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
EMERSON CLIMATE TECHNOLOGIES, INC.**

Facility ID:	0575010139
Permit Number:	P0114450
Permit Type:	Renewal
Issued:	5/20/2013
Effective:	5/20/2013
Expiration:	11/17/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
EMERSON CLIMATE TECHNOLOGIES, INC.

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Authorization

Facility ID: 0575010139
Application Number(s): A0047758
Permit Number: P0114450
Permit Description: PTIO Renewal permit for two 25.1 MMBtu/hr natural gas-fired boilers and one 14.6 MMBtu/hr natural gas-fired boiler.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 5/20/2013
Effective Date: 5/20/2013
Expiration Date: 11/17/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

EMERSON CLIMATE TECHNOLOGIES, INC.
1675 WEST CAMPBELL ROAD
Sidney, OH 45365

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0114450
Permit Description: PTIO Renewal permit for two 25.1 MMBtu/hr natural gas-fired boilers and one 14.6 MMBtu/hr natural gas-fired boiler.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	B008
Company Equipment ID:	Cleaver Brooks Boiler 516A
Superseded Permit Number:	P0088873
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B009
Company Equipment ID:	Cleaver Brooks #522
Superseded Permit Number:	P0088873
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B010
Company Equipment ID:	Cleaver Brooks 600 HP, 522R
Superseded Permit Number:	P0088873
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
EMERSON CLIMATE TECHNOLOGIES, INC.
Permit Number: P0114450
Facility ID: 0575010139
Effective Date: 5/20/2013

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Southwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
EMERSON CLIMATE TECHNOLOGIES, INC.
Permit Number: P0114450
Facility ID: 0575010139
Effective Date: 5/20/2013

B. Facility-Wide Terms and Conditions



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



Final Permit-to-Install and Operate
EMERSON CLIMATE TECHNOLOGIES, INC.
Permit Number: P0114450
Facility ID: 0575010139
Effective Date: 5/20/2013

C. Emissions Unit Terms and Conditions



1. B008, Cleaver Brooks Boiler 516A

Operations, Property and/or Equipment Description:

14.165MMBTU Natural GAS Boiler

a) 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-03547)	Particulate emissions (PM-10) shall not exceed 0.02lb/mmBtu and 0.92 tons per year (TPY). Organic compound (OC) emissions shall not exceed 0.85 TPY. Nitrogen oxides (NOx) emissions shall not exceed 9.20 TPY. Carbon monoxide (CO) emissions shall not exceed 2.30 TPY. Sulfur dioxide (SO2) emissions shall not exceed 2.61 TPY.
b.	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 provided by rule.
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rules 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 the use of natural gas and the emission limitations listed in term b)(l) above.
 - b. The lb/mmBtu actual heat input and tons per year emission limitations, except for SO₂, are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations
- c) Operational Restrictions
 - (1) The permittee shall burn only natural gas in the emission unit.
- d) Monitoring and/or Recordkeeping 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.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (mmft³) burned in this emissions unit.
- e) Reporting Requirements
 - (1) The permittee shall notify the Director (the appropriate local air agency or District Office) in writing of any fuel burned in this emissions unit other than natural gas.
 - (2) The notifications identified in terms e)(1) shall include a copy of such record and shall be sent to the Director (the appropriate local air agency or District Office) within 45 days after the deviation occurs..
- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation(s):

20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 60% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A, .



b. Emission Limitation(s):

9.20 TPY NO_x emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the annual emission limitation may be demonstrated by multiplying the lbNO_x/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

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.

c. Emission Limitation(s):

2.30 TPY CO emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98). Compliance with the annual emission limitation may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

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.

d. Emission Limitation(s):

0.85 TPY OC emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98). Compliance with the annual emission limitation may be demonstrated by multiplying the lb TOC/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

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 25.



e. Emission Limitation(s):

2.61 TPY SO₂ emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the annual emission limitation shall be determined by multiplying the annual average lb SO₂/mmBtu value by the annual average heat content and the total gallons on No. 2 fuel oil burned, and then dividing by 2000 lbs/ton.

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 6.

f. Emission Limitation(s):

0.92 TPY PE

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the annual emission limitation may be demonstrated by multiplying the lb PE/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

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..

g) Miscellaneous Requirements

(1) None.



2. B009, Cleaver Brooks #522

Operations, Property and/or Equipment Description:

25.1 MMBTU/HR NATURAL GAS- FIRED BOILER

- a) 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.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-05424)	Particulate emissions (PM-10) shall not exceed 0.02 lb/mmBtu. Combined Particulates emissions (PM-10) from emissions units B009 and B010 shall not exceed 0.982 tons per year (TPY). Organic compound (OC) emissions shall not exceed 0.003 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 0.55 TPY. Nitrogen oxide (NOx) emissions shall not exceed 0.13 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 27.48 TPY. Carbon monoxide (CO) emissions shall



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		not exceed 0.03 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 6.88 TPY. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0005 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 0.118 TPY. See Section c)(1)
b.	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 provided by rule.
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rules is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 60 Subpart Dc	The emission limitation specified by this rules is equal to 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 the use of natural gas and the emission limitations listed in term b)(l) above.
- b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (mmft³) burned in this emissions unit.



e) Reporting Requirements

- (1) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency

DAPC - Permit Management Unit

P.O. Box 163669

Columbus, Ohio 43216-3669

- (2) The permittee shall notify the Director (the appropriate local air agency or District Office) in writing of any fuel burned in this emissions unit other than natural gas

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):

20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 60% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- b. Emission Limitation(s):

0.13 lb/MMBTU, and

27.48 TPY NO_x emissions, B009 and B010 combined

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a



heating value of 1120 BTU's/scf and emission factor of 140 lbs of NOx emitted/MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 140 \text{ lbs of NOx/ MM scf}] / 25.1 \text{ MMBTU} = 0.13 \text{ lbs of NOx/MMBTU}$$

$$AER=[((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 140 \text{ lbs of NOx/ MM scf}] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 13.74 \text{ tons of NOx/yr}$$

- c. Combined B009 and B010 yearly: 13.74 tons per year x 2 = 27.48 tons of NOx per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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.

- d. Emission Limitation(s):

0.03 lb/MMBTU, and

6.88 TPY CO emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf and emission factor of 35 lbs of CO emitted/ MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 35 \text{ lbs of CO/ MM scf}] / 25.1 \text{ MMBTU} = 0.03 \text{ lbs of CO/MMBTU}$$

$$AER=[((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 35 \text{ lbs of CO/ MM scf}] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 3.44 \text{ tons of CO/yr}$$

Combined B009 and B010 yearly: 3.44 tons per year x 2 = 6.88 tons of CO per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).



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.

e. Emission Limitation(s):

0.003 lb of VOC /MMBTU, and

0.55 TPY VOC emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-3 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf, emission factor of 5.8 lbs of OC emitted/ MM scf of natural gas employed, and footnote "c" 52 % of OC is methane. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (5.8 \text{ lbs of OC/ MM scf} \times (1-52\%))] / 25.1 \text{ MMBTU} = 0.002 \text{ lbs of VOC/MMBTU}$$

$$AER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (5.8 \text{ lbs of OC/ MM scf} \times (1-52\%))] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 0.27 \text{ tons of VOC/yr}$$

Combined B009 and B010 yearly: 0.27 tons per year x 2 = 0.55 tons of VOC per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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 25.

f. Emission Limitation(s):

0.0005 lb of SO₂ /MMBTU, and

0.118 TPY SO₂ emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf, and emission factor of 0.6 lbs of SO₂ emitted/ MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (0.6 \text{ lbs of SO}_2\text{/ MM scf})] / 25.1 \text{ MMBTU} = 0.0005 \text{ lbs of SO}_2\text{/MMBTU}$$



$AER = \left[\frac{(25.1 \text{ MMBTU})}{1120 \text{ BTU's/scf}} \times (0.6 \text{ lbs of SO}_2 / \text{MM scf}) \right] \times \left[\frac{(8760 \text{ hrs/yr})}{(2000 \text{ lbs/ton})} \right] = 0.059 \text{ tons of SO}_2/\text{yr}$

Combined B009 and B010 yearly: $0.27 \text{ tons per year} \times 2 = 0.118 \text{ tons of SO}_2 \text{ per year, combined.}$

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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 6.

g. Emission Limitation(s):

0.02 lb of PE (PM-10) /MMBTU, and

0.982 TPY PE (PM-10) emissions, B009 and B010 combined.

The emission limitations were based upon the allowable emission rates of OAC rule 3745-17-10(B)(1) gaseous fuel limitation of 0.02 lbs/MMBTU. While annual combined emissions are based on emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-1 (10/92). Combined annual emission limitation was established based on natural having a heating value of 1120 BTU's/scf, and emission factor of 5.0 lbs of Filterable PM emitted/ MM scf of natural gas employed. The combined annual emission limitation was established by the following methodology:

$AER = \left[\frac{(25.1 \text{ MMBTU})}{1120 \text{ BTU's/scf}} \times (5.0 \text{ lbs of PE/ MM scf}) \right] \times \left[\frac{(8760 \text{ hrs/yr})}{(2000 \text{ lbs/ton})} \right] = 0.491 \text{ tons of PE (PM-10)/yr}$

Combined B009 and B010 yearly: $0.491 \text{ tons per year} \times 2 = 0.982 \text{ tons of PE (PM-10) per year, combined.}$

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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..

g) Miscellaneous Requirements

- (1) None.



3. B010, Cleaver Brooks 600 HP, 522R

Operations, Property and/or Equipment Description:

25.1 MMBTU/HR NATURAL GAS- FIRED BOILER

- a) 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.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-05424)	Particulate emissions (PM-10) shall not exceed 0.02 lb/mmBtu. Combined Particulates emissions (PM-10) from emissions units B009 and B010 shall not exceed 0.982 tons per year (TPY). Organic compound (OC) emissions shall not exceed 0.003 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 0.55 TPY. Nitrogen oxide (NOx) emissions shall not exceed 0.13 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 27.48 TPY. Carbon monoxide (CO) emissions shall



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		not exceed 0.03 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 6.88 TPY. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0005 lb/mmBtu. Combined Organic compound (OC) from emissions units B009 and B010 shall not exceed 0.118 TPY. See Section c)(1)
b.	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 provided by rule.
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rules is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 60 Subpart Dc	The emission limitation specified by this rules is equal to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

- (2) Additional Terms and Conditions
 - (3) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas and the emission limitations listed in term b)(l) above.
 - (4) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- c) Operational Restrictions
- (1) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (mmft³) burned in this emissions unit.



e) Reporting Requirements

- (1) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency

DAPC - Permit Management Unit

P.O. Box 163669

Columbus, Ohio 43216-3669

- (2) The permittee shall notify the Director (the appropriate local air agency or District Office) in writing of any fuel burned in this emissions unit other than natural gas .

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):

20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 60% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- b. Emission Limitation(s):

0.13 lb/MMBTU, and

27.48 TPY NO_x emissions, B009 and B010 combined

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a



heating value of 1120 BTU's/scf and emission factor of 140 lbs of NOx emitted/MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 140 \text{ lbs of NOx/ MM scf}] / 25.1 \text{ MMBTU} = 0.13 \text{ lbs of NOx/MMBTU}$$

$$AER=[((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 140 \text{ lbs of NOx/ MM scf}] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 13.74 \text{ tons of NOx/yr}$$

Combined B009 and B010 yearly: 13.74 tons per year x 2 = 27.48 tons of NOx per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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.

c. Emission Limitation(s):

0.03 lb/MMBTU, and

6.88 TPY CO emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf and emission factor of 35 lbs of CO emitted/ MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 35 \text{ lbs of CO/ MM scf}] / 25.1 \text{ MMBTU} = 0.03 \text{ lbs of CO/MMBTU}$$

$$AER=[((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times 35 \text{ lbs of CO/ MM scf}] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 3.44 \text{ tons of CO/yr}$$

Combined B009 and B010 yearly: 3.44 tons per year x 2 = 6.88 tons of CO per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).



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.

d. Emission Limitation(s):

0.003 lb of VOC /MMBTU, and

0.55 TPY VOC emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-3 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf, emission factor of 5.8 lbs of OC emitted/ MM scf of natural gas employed, and footnote "c" 52 % of OC is methane. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (5.8 \text{ lbs of OC/ MM scf} \times (1-52\%))] / 25.1 \text{ MMBTU} = 0.002 \text{ lbs of VOC/MMBTU}$$

$$AER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (5.8 \text{ lbs of OC/ MM scf} \times (1-52\%))] \times [(8760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})] = 0.27 \text{ tons of VOC/yr}$$

Combined B009 and B010 yearly: 0.27 tons per year x 2 = 0.55 tons of VOC per year, combined.

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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 25.

e. Emission Limitation(s):

0.0005 lb of SO₂ /MMBTU, and

0.118 TPY SO₂ emissions, B009 and B010 combined.

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-2 (10/92). Emission limitations were established based on natural having a heating value of 1120 BTU's/scf, and emission factor of 0.6 lbs of SO₂ emitted/ MM scf of natural gas employed. The hourly and annual emission limitations were established by the following methodology:

$$ER = [((25.1 \text{ MMBTU}) / 1120 \text{ BTU's/scf}) \times (0.6 \text{ lbs of SO}_2\text{/ MM scf})] / 25.1 \text{ MMBTU} = 0.0005 \text{ lbs of SO}_2\text{/MMBTU}$$



$AER = \left[\frac{(25.1 \text{ MMBTU})}{1120 \text{ BTU's/scf}} \times (0.6 \text{ lbs of SO}_2 / \text{MM scf}) \right] \times \left[\frac{(8760 \text{ hrs/yr})}{(2000 \text{ lbs/ton})} \right] = 0.059 \text{ tons of SO}_2/\text{yr}$

Combined B009 and B010 yearly: $0.27 \text{ tons per year} \times 2 = 0.118 \text{ tons of SO}_2 \text{ per year, combined.}$

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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 6.

f. Emission Limitation(s):

0.02 lb of PE (PM-10) /MMBTU, and

0.982 TPY PE (PM-10) emissions, B009 and B010 combined.

The emission limitations were based upon the allowable emission rates of OAC rule 3745-17-10(B)(1) gaseous fuel limitation of 0.02 lbs/MMBTU. While annual combined emissions are based on emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 1st Edition, Section 1.4.1, Table 1.4-1 (10/92). Combined annual emission limitation was established based on natural having a heating value of 1120 BTU's/scf, and emission factor of 5.0 lbs of Filterable PM emitted/ MM scf of natural gas employed. The combined annual emission limitation was established by the following methodology:

$AER = \left[\frac{(25.1 \text{ MMBTU})}{1120 \text{ BTU's/scf}} \times (5.0 \text{ lbs of PE/ MM scf}) \right] \times \left[\frac{(8760 \text{ hrs/yr})}{(2000 \text{ lbs/ton})} \right] = 0.491 \text{ tons of PE (PM-10)/yr}$

Combined B009 and B010 yearly: $0.491 \text{ tons per year} \times 2 = 0.982 \text{ tons of PE (PM-10) per year, combined.}$

Applicable Compliance Method(s):

Is based on the maximum heat capacity of both B009 and B010 is 25.1 MMBTU's/hr and the use of emission factors from AP-42, 1st Edition (10/92).

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..

g) Miscellaneous Requirements

- (1) None.