



Environmental Protection Agency

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

9/20/2012

Hilda Pappas
LUMI-LITE CANDLE CO. INC.
102 SUNDALE RD.
NORWICH, OH 43767

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0660000246
Permit Number: P0089924
Permit Type: Renewal
County: Muskingum

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
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 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
LUMI-LITE CANDLE CO. INC.**

Facility ID:	0660000246
Permit Number:	P0089924
Permit Type:	Renewal
Issued:	9/20/2012
Effective:	9/20/2012
Expiration:	9/20/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
LUMI-LITE CANDLE CO. INC.

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
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? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. P001, #1 Chiller 11
2. P002, #2 Chiller 17

Authorization

Facility ID: 0660000246
Application Number(s): A0021214, A0021215, A0021216
Permit Number: P0089924
Permit Description: PTIO renewal for P001 and P002: Chiller Cooling Systems for internal combustion engines.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 9/20/2012
Effective Date: 9/20/2012
Expiration Date: 9/20/2022
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

LUMI-LITE CANDLE CO. INC.
102 SUNDALE RD.
Norwich, OH 43767

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

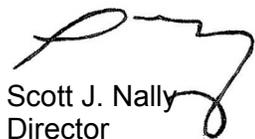
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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: P0089924
Permit Description: PTIO renewal for P001 and P002: Chiller Cooling Systems for internal combustion engines.

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

Group Name: Engines for cooling system

Emissions Unit ID:	P001
Company Equipment ID:	#1 Chiller
Superseded Permit Number:	P0089921
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	#2 Chiller
Superseded Permit Number:	P0089922
General Permit Category and Type:	Not Applicable

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, Southeast 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.

B. Facility-Wide Terms and Conditions

Final Permit-to-Install and Operate

LUMI-LITE CANDLE CO. INC.

Permit Number: P0089924

Facility ID: 0660000246

Effective Date: 9/20/2012

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.

C. Emissions Unit Terms and Conditions

1. P001, #1 Chiller

Operations, Property and/or Equipment Description:

#1 Chiller Cooling System; 126 HP rich burn natural gas fired internal combustion engine with a 1.1 MMBtu/hr capacity (Model No. TecoDrive 7400) (Supersedes State PTO P0089921, issued 9/5/2001)

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 (as established in State PTO P0089921, issued 9/5/2001)	Nitrogen Oxides (NOx) emissions shall not exceed 10.6 tons per year (TPY). Carbon Monoxide (CO) emissions shall not exceed 17.9 TPY. Particulate Emissions (PE) shall not exceed 0.046 TPY. Volatile Organic Compounds (VOC) shall not exceed 1.7 TPY. Sulfur Dioxide (SO2) shall not exceed 0.0028 TPY.
b.	OAC rule 3745-17-11	PE shall not exceed 0.310 pound per million British thermal units ("Btu") of actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average , except as provided by rule

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The permittee shall only burn natural gas in this emissions unit.
 - (2) The maximum annual natural gas usage for emissions units P001 and P002 combined shall not exceed 8.72 million cubic feet per year.
- 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 records of the total natural gas usage for each year for sources P001 and P002 combined.
 - (3) The permittee shall maintain records of the actual hour of operation for each calendar year for this emissions unit.
- e) Reporting Requirements
 - (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
 - (2) The permittee shall submit an annual report which specifies the total natural gas usage, and the tons per year NOx emissions, for emission units P001 and P002 combined, for the previous calendar year. This report shall also contain the tons per year of CO and particulate emissions for this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
- 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. Emissions Limitations:

PE shall not exceed 0.310 pound per million Btu of actual heat input and 0.34 pound per hour

Applicable Compliance Method:

Compliance with the particulate emission limit of 0.34 pound per hour of particulate emissions is demonstrated upon multiplying the maximum hourly gas burning capacity of the emission unit (1.10 mmBtu/hr) by the AP-42 emission factor (Table 3.3-1, 10/96 revision) for diesel fuel (0.310 lb/mmBtu).

Note: Compliance with the particulate emission limit of 0.310 pound per million Btu of actual heat input is based on the emission factor from AP-42, Table 3.3-1(dated October 1996). There is no emission factor for burning natural gas but it is assumed to burn at least as clean as diesel fuel.

If required by Ohio EPA, compliance with these emission limitations shall be demonstrated in accordance with 40 CFR Part 60, Appendix A, Methods 1-5, as appropriate, and the procedures specified in OAC rule 3745-17-03(B)(10).

b. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required by Ohio EPA, compliance with the visible emission limit shall be demonstrated through visible 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).

c. Emissions Limitation:

NOx emissions shall not exceed 10.6 TPY.

Applicable Compliance Method:

Equation used: (EF in lb/MMBtu)*(Capacity in MMBtu/hr)*(0.0005 tons/lb)*(8760 hrs/year)

Emission Factor (EF) = 2.21 lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

= (2.21 lb/MMBtu)(1.1 MMBtu/hr)(0.0005 tons/lb)*(8760 hrs/yr)

= 10.6 TPY

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:

CO emissions shall not exceed 17.9 TPY.

Applicable Compliance Method:

EF = 3.72lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

= (3.72 lb/MMBtu)(1.1 MMBtu/hr)(0.0005 tons/lb)*(8760 hrs/yr)

= 17.9 TPY

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:

PE shall not exceed 0.046 TPY.

Applicable Compliance Method:

Equation used: (EF in lb/MMBtu)*(Capacity in MMBtu/hr)*(0.0005 tons/lb)*(8760 hrs/year)

EF = 0.0095 lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

= (0.0095 lb/MMBtu)(1.1 MMBtu/hr)(0.0005 tons/lb)*(8760 hrs/yr)

= 0.046 TPY

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources"., and the procedures specified in OAC rule 3745 17 03(B)(10) Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

f. Emissions Limitation:

VOC shall not exceed 1.7 TPY.

Applicable Compliance Method:

Equation used: $(EF \text{ in lb/MMBtu}) \times (\text{Capacity in MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/year})$

$EF = 0.358 \text{ lb/MMBtu}$ (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

$= (0.358 \text{ lb/MMBtu}) \times (1.1 \text{ MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/yr})$

= 1.7 TPY

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g. Emissions Limitation:

SO₂ shall not exceed 0.0028 TPY.

Applicable Compliance Method:

Equation used: $(EF \text{ in lb/MMBtu}) \times (\text{Capacity in MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/year})$

$EF = 0.000588 \text{ lb/MMBtu}$ (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

$= (0.000588 \text{ lb/MMBtu}) \times (1.1 \text{ MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/yr})$

= 0.0028 TPY

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

h. Operational Restriction:

The maximum annual natural gas usage for emissions units P001 and P002 combined shall not exceed 8.72 million cubic feet per year. Applicable Compliance Method:

Compliance shall be demonstrated through the monitoring and record keeping in d)(2).

g) Miscellaneous Requirements

- (1) None.

2. P002, #2 Chiller

Operations, Property and/or Equipment Description:

#2 Chiller Cooling System; 126 HP rich burn natural gas fired internal combustion engine with a 1.1 MMBtu/hr capacity (Model No. TecoDrive 7400) (Supersedes State PTO P0089922, issued 9/5/2001)

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 (as established in State PTO P0089922, issued 9/5/2001)	NOx emissions shall not exceed 10.6 tons per year (TPY). CO emissions shall not exceed 17.9 TPY. PE shall not exceed 0.046 TPY. VOC shall not exceed 1.7 TPY. SO2 shall not exceed 0.0028 TPY.
b.	OAC rule 3745-17-11(B)	PE shall not exceed 0.310 pound per million British thermal units ("Btu") of actual heat input.
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The permittee shall burn only natural gas in this emissions unit.
 - (2) The maximum annual natural gas usage for emissions units P001 and P002 combined shall not exceed 8.72 million cubic feet per year.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) For each day during which this emission unit burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned.
 - (2) The permittee shall maintain records of the total natural gas usage for each calendar year for sources P001 and P002 combined.
 - (3) The permittee shall maintain records of the actual hours of operation for each calendar year for this emission unit.
- e) Reporting Requirements
 - (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emission unit. Each report shall be submitted within 30 days after the deviation occurs.
 - (2) The permittee shall submit an annual report which specifies the total natural gas usage, and the tons per year NOx emissions, for emission units P001 and P002 combined, for the previous calendar year. This report shall also contain the tons per year of CO and particulate emissions for this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
- 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. Emissions Limitation:

PE shall not exceed 0.310 pound per million Btu of actual heat input and 0.34 pound per hour

Applicable Compliance Method:

Compliance with the particulate emission limit of 0.34 pound per hour of particulate emissions is demonstrated upon multiplying the maximum hourly gas burning capacity of the emission unit (1.10 mmBtu/hr) by the AP-42 emission factor (Table 3.3-1, 10/96 revision) for diesel fuel (0.310 lb/mmBtu).

Note: Compliance with the particulate emission limit of 0.310 pound per million Btu of actual heat input is based on the emission factor from AP-42, Table 3.3-1(dated October 1996). There is no emission factor for burning natural gas but it is assumed to burn at least as clean as diesel fuel.

If required by Ohio EPA, compliance with these emission limitations shall be demonstrated in accordance with 40 CFR Part 60, Appendix A, Methods 1-5, as appropriate, and the procedures specified in OAC rule 3745-17-03(B)(10).

b. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required by Ohio EPA, compliance with the visible emission limit shall be demonstrated through visible 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).

c. Emissions Limitation:

NOx emissions shall not exceed 10.6 TPY.

Applicable Compliance Method:

Equation used: $(EF \text{ in lb/MMBtu}) \times (\text{Capacity in MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/year})$

Emission Factor (EF) = 2.21 lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

$= (2.21 \text{ lb/MMBtu})(1.1 \text{ MMBtu/hr})(0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/yr})$

$= 10.6 \text{ TPY}$

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:

CO emissions shall not exceed 17.9 TPY.

Applicable Compliance Method:

EF = 3.72lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

$$= (3.72 \text{ lb/MMBtu})(1.1 \text{ MMBtu/hr})(0.0005 \text{ tons/lb})(8760 \text{ hrs/yr})$$

$$= 17.9 \text{ TPY}$$

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:

PE shall not exceed 0.046 TPY.

Applicable Compliance Method:

Equation used: $(\text{EF in lb/MMBtu}) \times (\text{Capacity in MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/year})$

$$\text{EF} = 0.0095 \text{ lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))}$$

Capacity = 1.1 MMBtu/hr

$$= (0.0095 \text{ lb/MMBtu})(1.1 \text{ MMBtu/hr})(0.0005 \text{ tons/lb})(8760 \text{ hrs/yr})$$

$$= 0.046 \text{ TPY}$$

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources"., and the procedures specified in OAC rule 3745 17 03(B)(10) Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

f. Emissions Limitation:

VOC shall not exceed 1.7 TPY.

Applicable Compliance Method:

Equation used: $(\text{EF in lb/MMBtu}) \times (\text{Capacity in MMBtu/hr}) \times (0.0005 \text{ tons/lb}) \times (8760 \text{ hrs/year})$

$$\text{EF} = 0.358 \text{ lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))}$$

Capacity = 1.1 MMBtu/hr

$$= (0.358 \text{ lb/MMBtu})(1.1 \text{ MMBtu/hr})(0.0005 \text{ tons/lb})(8760 \text{ hrs/yr})$$

$$= 1.7 \text{ TPY}$$

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g. Emissions Limitation:

SO₂ shall not exceed 0.0028 TPY.

Applicable Compliance Method:

Equation used: (EF in lb/MMBtu)*(Capacity in MMBtu/hr)*(0.0005 tons/lb)*(8760 hrs/year)

EF = 0.000588 lb/MMBtu (AP-42 Section 3.2. Table 3.2-3 (7/00))

Capacity = 1.1 MMBtu/hr

= (0.000588 lb/MMBtu)(1.1 MMBtu/hr)(0.0005 tons/lb)*(8760 hrs/yr)

= 0.0028 TPY

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

(1) None.