

4/1/2010

Certified Mail

Mr. Timothy Bosier
CANDLE-LITE INC
P.O. Box 385
250 Eastern Avenue
Leesburg, OH 45135

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
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)

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0536000020
Permit Number: P0106116
Permit Type: OAC Chapter 3745-31 Modification
County: Highland

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 Kevin Boyce," 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, Southwest District Office at (937)285-6357 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web 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-SWDO



FINAL

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

Facility ID: 0536000020
Permit Number: P0106116
Permit Type: OAC Chapter 3745-31 Modification
Issued: 4/1/2010
Effective: 4/1/2010
Expiration: 4/1/2020



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

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Authorization

Facility ID: 0536000020
Application Number(s): A0039222
Permit Number: P0106116
Permit Description: Address increased potential throughputs and emissions increase
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$600.00
Issue Date: 4/1/2010
Effective Date: 4/1/2010
Expiration Date: 4/1/2020
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

CANDLE-LITE INC
EASTERN AVENUE
LEESBURG, OH 45135

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, 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



Chris Korleski
Director



Authorization (continued)

Permit Number: P0106116
Permit Description: Address increased potential throughputs and emissions increase

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

Emissions Unit ID:	P031
Company Equipment ID:	Fill Line 7
Superseded Permit Number:	05-12804
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P034
Company Equipment ID:	Fill Line 4
Superseded Permit Number:	05-12804
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P036
Company Equipment ID:	Fill Line 5A
Superseded Permit Number:	05-12804
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, 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.

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.

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).

B. Facility-Wide Terms and Conditions



1. **This permit document constitutes a permit-to-install issued in accordance with ORC Section 3704.03(F) and a permit-to-operate issued in accordance with ORC Section 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. P031, Fill Line 7

Operations, Property and/or Equipment Description:

Candle filling line 7

a) This permit document constitutes a permit-to-install issued in accordance with ORC Section 3704.03(F) and a permit-to-operate issued in accordance with ORC Section 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. b)(1)d. and d)(3), below.

(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 operations, 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 set forth 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 paragraph 3745-31-05(A)(3), as effective 11/30/01	The annual OC emissions from this emissions unit shall not exceed 4.6 tons, from actual candle production. The annual OC emissions from the use of inks and makeup solvents shall not exceed 0.44 tons, from printing operations involving candles produced in this emissions unit. See Sections b)(2)a., c)(1), c)(2), d)(1), d)(2), and e)(1), below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)b., below.
c.	OAC rule 3745-21-07(G)(2)	The OC emissions from this emissions unit shall not exceed 8 pounds per hour



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		nor 40 pounds per, when employing photochemically reactive materials. See section s b)(2)c. and f)(1)b., below.
d.	OAC rule 3745-114-01	Ohio Air Toxics Rule See section d)(3), below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the organic compounds (OC) and/or volatile organic compounds (VOC) emissions from this emissions unit since the potential emissions are less than ten tons per year.

c. On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (G); therefore, paragraph (G) is no longer part of the State regulations. However, that rule revision has not been approved by the U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs to OAC rule 3745-21-07, the requirement of the previous OAC rule 3745-21-07(G) still exists as part of the federally approved SIP for Ohio.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the terms and conditions within this permit which are required by previous OAC rule 3745-21-07(G) will not be required and will not be federally and/or state enforceable.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the permittee shall take immediate steps to



assure compliance with any and all requirements of the revised OAC rule and/or SIP.

c) Operational Restrictions

- (1) The OC/VOC content of the ink/makeup solvents mix employed in this emissions unit shall not exceed 6.75 pounds per gallon, as applied.
- (2) Fill station wax hoppers shall be equipped with lids and kept in a closed position unless internal access is required.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. The company identification of each ink/makeup solvent mix employed; and
 - b. The OC/VOC content of the ink/makeup solvent mix, in pounds per gallon, as applied.
- (2) The permittee shall maintain records that document any time periods when the lid(s) to the fill station wax hoppers were not in service when this emissions unit was in operation, as well as, a record of all operations during which the lid(s) were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (3) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittee(s) to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. an identification of each **instance when** the **OC/VOC** content of the ink and/or makeup solvent employed exceeded 6.75 pounds per gallon, as applied.



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

4.6 tons of OC/VOC per year, from actual candle production

The above limitations are based on the following equations:

$$AER = \{[(MPWR) \times (EF_c)] \times 8760\} / 2000$$

Where:

AER= Annual emission rate, in tons per year;

MPWR= the maximum process weight rate (3,200 lbs. of product/hr); and

EF_c= the emission factor, (3.285 E-04 lbs of OC emitted per pound of product)
EF_c was developed by company-sponsored research and is based on the following equation:

$$EF_c = [((-0.000207 \times (C \times 100))^2) + (0.0298 \times (C \times 100)) + 0.0007] / 1000$$

Where:

C= is the fragrance content, lb fragrance per lb scented candle wax
(maximum 0.12 (12% by weight));

Applicable Compliance Method:

Compliance based on the maximum fragrance content of products produced in this emissions unit shall not exceed 12% by weight, the use of the above equations, and the assumption that the emissions unit's maximum hourly throughput cannot exceed 3,200 pounds per hour, of product.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

b. Emission Limitation:

0.44 tons of OC/VOC per year, from the use of inks and/or makeup solvents

The above limitations are based on the following equations:

$$\text{AER} = [(\text{Ur} \times \text{Oc}) \times 8760] / 2000$$

Where:

AER= Annual emission rate, in tons per year;

Ur = Maximum ink and/or solvent makeup hourly usage rate, in gallons per hour, (0.0149 gallons per hour); and

Oc= Organic compound content, in pounds per gallon, as applied, 6.75.

Applicable Compliance Method:

Compliance based on the maximum OC content of inks and/or makeup solvents not exceeding 6.75 pounds per gallon, as applied, and the maximum hourly usage not exceeding 0.0149 gallons.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

c. Emission Limitation:

8 pounds per hour nor 40 pounds per day of OC, when employing photochemically reactive materials.

The potential hourly and daily OC emissions are based on the following equation:

$$\text{HER} = (\text{MPWR} \times \text{EFc}) + (\text{Ur} \times \text{Oc}); \text{ and}$$

$$\text{DER} = \text{HER} \times 24$$

Where:

HER = hourly emission rate, in pounds per hour,

$$\text{HER} = (3,200 \text{ lbs} \times 3.285 \text{ E-}04 \text{ lbs}) + (0.0149 \text{ gallons} \times 6.75 \text{ lbs})$$

$$\text{HER} = 1.15 \text{ lbs of OC per hour};$$

and

DER= daily emission rate, in pounds per day,

$$\text{DER} = 1.15 \text{ lbs of OC per hour} \times 24 \text{ hours per day}$$

$$\text{DER} = 27.6 \text{ lbs of OC per day}.$$



Applicable Compliance Method:

Compliance based on the potential hourly and day OC emissions from this emissions unit are below the 8 pound per hour and 40 pound per day limitation, regardless of the use of PRM containing materials or non-PRM containing materials.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

g) Miscellaneous Requirements

(1) None.

2. P034, Fill Line 4

Operations, Property and/or Equipment Description:

Candle filling line 4

a) This permit document constitutes a permit-to-install issued in accordance with ORC Section 3704.03(F) and a permit-to-operate issued in accordance with ORC Section 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. b)(1)d. and d)(3), below.

(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 operations, 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 set forth 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 paragraph 3745-31-05(A)(3), as effective 11/30/01	The annual OC/VOC emissions from this emissions unit shall not exceed 7.0 tons, from actual candle production. The annual OC/VOC emissions from the use of inks and makeup solvents shall not exceed 0.44 tons, from printing operations involving candles produced in this emissions unit. See Sections b)(2)a., c)(1), c)(2), c)(3), d)(1), d)(2), and e)(1), below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)b., below.
c.	OAC rule 3745-21-07(G)(2)	The OC emissions from this emissions unit shall not exceed 8 pounds per hour



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		nor 40 pounds per, when employing photochemically reactive materials. See Sections b)(2)c., d)(4), e)(2), and f)(1)b., below.
d.	OAC rule 3745-114-01	Ohio Air Toxics Rule See Section d)(3), below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the organic compounds (OC) and/or volatile organic compounds (VOC) emissions from this emissions unit since the potential emissions are less than ten tons per year.
- c. On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (G); therefore, paragraph (G) is no longer part of the State regulations. However, that rule revision has not been approved by the U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs to OAC rule 3745-21-07, the requirement of the previous OAC rule 3745-21-07(G) still exists as part of the federally approved SIP for Ohio.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the terms and conditions within this permit which are required by previous OAC rule 3745-21-07(G) will not be required and will not be federally and/or state enforceable.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State



Implementation Plan (SIP) is revised, the permittee shall take immediate steps to assure compliance with any and all requirements of the revised OAC rule and/or SIP.

c) Operational Restrictions

- (1) The OC/VOC content of the ink/makeup solvents mix employed in this emissions unit shall not exceed 6.75 pounds per gallon, as applied.
- (2) Fill station wax hoppers shall be equipped with lids and kept in a closed position unless internal access is required.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. The company identification of each fragrance, and/or ink/makeup solvent mix employed; and
 - b. The OC/VOC content of the ink/makeup solvent mix, in pounds per gallon, as applied.
- (2) The permittee shall maintain records that document any time periods when the lid(s) to the fill station wax hoppers were not in service when this emissions unit was in operation, as well as, a record of all operations during which the lid(s) were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (3) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittee(s) to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

[ORC 3704.03(F)(3)(c) and F(4)]

- (4) The permittee shall collect and record the following daily records, when employing photochemically reactive containing materials in this emissions unit:
 - a. The name and identification number of each material employed;
 - b. The amount of each ink/makeup solvent employed, in gallons;
 - c. The OC content of each ink/makeup solvent employed, in pounds per gallon;



- d. The total amount of OC emitted from ink/makeup solvent, in pounds per day, (the summation of: (“b” x “c”);
- e. The amount of product produced, in pounds;
- f. The fragrance* content of the product produced, in pounds fragrance per pound scented wax;
- g. The total amount of OC emitted, in pounds, based on the following equation:

$$DER = \text{Sum } i (DPRCi \times EFCi) + (Ur \times Oc)$$

Where:

DER = Daily OC emissions, in pounds;

DPRCi = Actual daily production rate, in pounds of product produced;

EFCi¹= The emission factor at fragrance content Ci,

$$EFCi = ((-0.000339 \times (Ci \times 100)^2) + (0.0485 \times (Ci \times 100)) + 0.0012) / 1000.$$

Ur = Ink and/or solvent makeup actual usage rate, in gallons; and

Ci= Fragrance content, in pounds per pound scented wax.

¹ EFCi was developed by company-sponsored research.

* fragrance is assumed to be 100% OC.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. an identification of each instance when the OC/VOC content of the ink and/or makeup solvent employed exceeded 6.75 pounds per gallon, as applied.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each instances when the daily OC emissions exceeded 40 pounds per day, when photochemically reactive materials were being employed.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

7.0 tons of OC/VOC per year

The above limitations are based on the following equations:

$$AER = \{[(MPWR) \times (EF_c)] \times 8760\} / 2000$$

Where:

MPWR= the maximum process weight rate (3,000 lbs. of product/hr): and

EF_c= the emission factor, (5.344 E-04 lbs of OC emitted per pound of product)
EF_c was developed by company-sponsored research and is based on the is the following equation:

$$EF_c = [((-0.000339 \times (C \times 100)^2) + (0.0485 \times (C \times 100)) + 0.0012)] / 1000$$

Where:

C= is the fragrance content, lb fragrance per lb scented candle wax (maximum 0.12 or 12% by weight);

Applicable Compliance Method:

Compliance based on the maximum fragrance content of products produced in this emissions unit shall not exceed 0.12 (12% by weight), the use of the above equations, and the assumption that the emissions unit's maximum hourly throughput cannot exceed 3,000 pounds per hour, of product.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

b. Emission Limitation:

8 pounds per hour nor 40 pounds per day of OC, when employing photochemically reactive materials.

PHER = potential hourly emission rate, in pounds per hour,

$$HER = (3,000 \text{ lbs} \times 5.344 \text{ E-04 lbs}) + (0.0149 \text{ gallons} \times 6.75 \text{ lbs})$$



PHER = 1.60 lbs of OC per hour

Applicable Compliance Method:

Compliance based on maximum potential hourly is below 8 pounds per hour and the daily emissions based on recordkeeping and reporting requirements in sections d)(4) and e)(2) of these terms and conditions.

g) Miscellaneous Requirements

- (1) None.

3. P036, Fill Line 5A

Operations, Property and/or Equipment Description:

Candle filling line 5a

- a) This permit document constitutes a permit-to-install issued in accordance with ORC Section 3704.03(F) and a permit-to-operate issued in accordance with ORC Section 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. b)(1)d. and d)(3), below.
 - (1) 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 operations, 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 set forth 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 paragraph 3745-31-05(A)(3), as effective 11/30/01	The annual OC/VOC emissions from this emissions unit shall not exceed 5.1 tons, from actual candle production. The annual OC/VOC emissions from the use of inks and makeup solvents shall not exceed 0.44 tons, from printing operations involving candles produced in this emissions unit. See Sections b)(2)a., c)(1), c)(2), d)(1), d)(2), and e)(1), below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)b., below.
c.	OAC rule 3745-21-07(G)(2)	The OC emissions from this emissions unit shall not exceed 8 pounds per hour nor 40 pounds per, when employing photochemically reactive materials.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See section s b)(2)c. and f)(1)b., below.
d.	OAC rule 3745-114-01	Ohio Air Toxics Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the organic compounds (OC) and/or volatile organic compounds (VOC) emissions from this emissions unit since the potential emissions are less than ten tons per year.
- c. On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (G); therefore, paragraph (G) is no longer part of the State regulations. However, that rule revision has not been approved by the U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs to OAC rule 3745-21-07, the requirement of the previous OAC rule 3745-21-07(G) still exists as part of the federally approved SIP for Ohio.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the terms and conditions within this permit which are required by previous OAC rule 3745-21-07(G) will not be required and will not be federally and/or state enforceable.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the permittee shall take immediate steps to assure compliance with any and all requirements of the revised OAC rule and/or SIP.



c) Operational Restrictions

- (1) The OC/VOC content of the ink/makeup solvents mix employed in this emissions unit shall not exceed 6.75 pounds per gallon, as applied.
- (2) Fill station wax hoppers shall be equipped with lids and kept in a closed position unless internal access is required.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. The company identification of each fragrance, and/or ink/makeup solvent mix employed; and
 - b. The OC/VOC content of the ink/makeup solvent mix, in pounds per gallon, as applied.
- (2) The permittee shall maintain records that document any time periods when the lid(s) to the fill station wax hoppers were not in service when this emissions unit was in operation, as well as, a record of all operations during which the lid(s) were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (3) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittee(s) to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. an identification of each instance when the OC/VOC content of the ink and/or makeup solvent employed exceeded 6.75 pounds per gallon, as applied.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5.1 tons of OC/VOC per year

The above limitations are based on the following equations:

$$AER = \{[(MPWR) \times (EF_c)] \times 8760\} / 2000$$

Where:

MPWR= the maximum process weight rate (2,400 lbs. of product/hr): and

EF_c= the emission factor, (5.344 E-04 lbs of OC/VOC emitted per pound of product) EF_c was developed by company-sponsored research and is based on the is the following equation:

$$EF_c = [((-0.0003055 \times (C \times 100)^2) + (0.0439 \times (C \times 100)) + 0.0011)] / 1000$$

Where:

C= is the fragrance content, lb fragrance per lb scented candle wax (maximum 12% by weight);

Applicable Compliance Method:

Compliance is based on the maximum fragrance content of products produced on in this emissions unit shall not exceed 12% by weight, the use of the above equations, and the assumption that the emissions unit's maximum hourly throughput cannot exceed 2,400 pounds per hour.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

b. Emission Limitation:

8 pounds per hour nor 40 pounds per day of OC, when employing photochemically reactive materials.

The potential hourly and daily OC emissions are based on the following equation:

$$HER = (MPWR \times EF_c) + (U_r \times O_c): \text{ and}$$



$$\text{DER} = \text{HER} \times 24$$

Where:

HER = hourly emission rate, in pounds per hour,

$$\text{HER} = (2,400 \text{ lbs} \times 4.839 \text{ E-}04 \text{ lbs}) + (0.0149 \text{ gallons} \times 6.75 \text{ lbs})$$

$$\text{HER} = 1.26 \text{ lbs of OC per hour;}$$

and

DER = daily emission rate, in pounds per day,

$$\text{DER} = 1.26 \text{ lbs of OC per hour} \times 24 \text{ hours per day}$$

$$\text{DER} = 30.24 \text{ lbs of OC per day.}$$

Applicable Compliance Method:

Compliance is based on the potential hourly and day OC emissions from this emissions unit are below the 8 pound per hour and 40 pound per day limitation, regardless of the use of PRM containing materials or non-PRM containing materials.

Any changes in this emissions unit and/or the above equations that would cause an increase in the potential hourly emissions from this emissions unit will need to be reviewed by the appropriate office for possible additional air pollution permit requirements.

- g) Miscellaneous Requirements
 - (1) None.