



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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Columbus, Ohio 43215

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P.O. Box 1049  
Columbus, OH 43216-1049

6/25/2009

J. Randy O'Dell  
JAFE DECORATING CO. INC.  
1250 MARTIN ST  
GREENVILLE, OH 45331

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0819070215  
Permit Number: P0104505  
Permit Type: Initial Installation  
County: Darke

Certified Mail

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

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.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc), from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Regional Air Pollution Control Agency. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: RAPCA

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install and Operate  
for  
JAFE DECORATING CO. INC.**

Facility ID: 0819070215  
Permit Number: P0104505  
Permit Type: Initial Installation  
Issued: 6/25/2009  
Effective: 6/25/2009  
Expiration: 6/25/2019





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Permit-to-Install and Operate**  
for  
**JAFE DECORATING CO. INC.**

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**  
**Permit Number:** P0104505  
**Facility ID:** 0819070215  
**Effective Date:** 6/25/2009

## Authorization

Facility ID: 0819070215  
Application Number(s): A0036584  
Permit Number: P0104505  
Permit Description: Administrative modification to remove revise the exhaust concentration restriction (parametric monitoring), remove the permit requirement to control P006 (permit error) and to remove the TPT scenario #5, which makes the facility a natural minor facility (no longer synthetic minor to avoid Title V).

Permit Type: Initial Installation  
Permit Fee: \$200.00  
Issue Date: 6/25/2009  
Effective Date: 6/25/2009  
Expiration Date: 6/25/2019  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

JAFE DECORATING CO. INC.  
1250 MARTIN ST  
Greenville, OH 45331

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:

Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280  
(937)225-4435

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: P0104505  
Permit Description: Administrative modification to remove revise the exhaust concentration restriction (parametric monitoring), remove the permit requirement to control P006 (permit error) and to remove the TPT scenario #5, which makes the facility a natural minor facility (no longer synthetic minor to avoid Title V).

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

- |                                   |                           |
|-----------------------------------|---------------------------|
| <b>Emissions Unit ID:</b>         | <b>K006</b>               |
| Company Equipment ID:             | Chain-on-Edge Paint Booth |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |
| <b>Emissions Unit ID:</b>         | <b>P006</b>               |
| Company Equipment ID:             | Chain-on-Edge Curing Oven |
| Superseded Permit Number:         |                           |
| General Permit Category and Type: | Not Applicable            |



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104505

**Facility ID:** 0819070215

**Effective Date:** 6/25/2009

## **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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 Regional Air Pollution Control Agency 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 submitting 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 emission 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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104505

**Facility ID:** 0819070215

**Effective Date:** 6/25/2009

**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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104505

**Facility ID:** 0819070215

**Effective Date:** 6/25/2009

## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104505

**Facility ID:** 0819070215

**Effective Date:** 6/25/2009

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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104505

**Facility ID:** 0819070215

**Effective Date:** 6/25/2009

## **C. Emissions Unit Terms and Conditions**



**1. K006, Chain-on-Edge Paint Booth**

**Operations, Property and/or Equipment Description:**

Chain-on-Edge Paint Booth

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 operations(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. 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)	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 30 lbs/day, excluding cleanup and 7.2 tons per year (TPY), including cleanup.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(M)(2).
b.	OAC rule 3745-21-07(M)(2)	See b)(2)d.

(2) Additional Terms and Conditions

a. Emission unit K006 is capable of operating under the following four different scenarios:

i. operating scenario #1: coating operation when the cure oven, P006, is being employed and the carbon adsorber is not being employed.



- ii. operating scenario #2: coating operation when the cure oven, P006, is being employed and the carbon adsorber is being employed.
- iii. operating scenario #3: coating operation when the cure oven, P006, is not being employed and the carbon adsorber is not being employed.
- iv. operating scenario #4: coating operation when the cure oven, P006, is not being employed and the carbon adsorber is being employed.

b. When operating scenario #1 or #2 is being employed:

For purposes of calculating the VOC emission rates for this emissions unit, K006 and the associated oven, emissions unit P006, the permittee shall utilize a value of 80% of the VOCs employed in this emission unit are emitted from emissions unit K006. The remaining 20% of the VOCs employed in this emissions unit shall be considered as emissions from the associated oven, emissions unit P006. The emissions split between units K006 and P006 is based upon average coating operation data.

c. When operating scenario #3 or #4 is being employed:

For the purposes of calculating VOC emission rates for this emissions unit when not employing the cure oven, it is not necessary for the permittee to utilize the 80/20 split described in b)(2)b.

d. When operating scenario #2 or #4 is being employed:

The VOC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure (PTE) with 100 percent capture efficiency and a carbon adsorber with a removal efficiency of at least 90%, by weight, for VOC.

e. The permanent total enclosure shall be constructed to totally enclose the emissions unit such that all VOC emissions are captured, contained, and directed to the control device.

f. The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation under operating scenario #2 or #4, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

- i. Any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point. An equivalent diameter is the diameter of a circle that has the same area as the opening. If the opening is not circular the equivalent diameter (ED) is calculated as follows:



$$ED = (4 * \text{area} / \pi)^{0.5}$$

- ii. The total area of all natural draft openings ( $A_N$ ) shall not exceed 5 percent of the total surface area of the enclosure ( $A_T$ ), i.e, the four walls, floor, and ceiling. The natural draft opening to enclosure area ratio (NEAR) is calculated as follows:

$$\text{NEAR} = A_N / A_T$$

- iii. The direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. H<sub>2</sub>O).
- iv. All access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in b)(2)f.ii, shall be completely closed to any air movement during process operations.
- v. All VOC emissions shall be captured and contained for discharge through the control device.

- g. The permanent total enclosure (PTE) serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all of the VOC emissions from this emissions unit.
- h. This emissions unit is permitted at its potential to emit, as defined in OAC rule 3745-31-01, for all pollutants.

c) Operational Restrictions

- (1) When operating scenario #2 or #4 is being employed, the permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 in. H<sub>2</sub>O), whenever the emissions unit is in operation.
- (2) When operating scenario #2 or #4 is being employed, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed 25 ppm as isobutylene.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
  - a. the measured diameter of each natural draft opening;
  - b. the distance measured from each natural draft opening to each VOC emitting point;
  - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;



- d. the calculation or demonstration that the distance from each VOC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
  - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.
- (2) The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the permanent total enclosure when the emissions unit is in operation under operating scenario #2 or #4. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

When operating scenario #2 or #4 is being employed, the permittee shall collect and record the following information each day:

- a. all three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three hour average; and
  - b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.
- (3) The permittee shall properly install, operate, and maintain a continuous organic monitoring device and recorder that measures and records the VOC concentrations in the exhaust gases from the carbon adsorber when the emissions unit is in operation, including periods of startup and shutdown. The organic monitoring device and recorder shall be capable of accurately measuring the VOC concentration. The organic monitoring device and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

When operating scenario #2 or #4 is being employed, the permittee shall collect and record the following information each day:

- a. all 3-hour blocks of time, when the emissions unit controlled by the carbon adsorber was in operation, during which the average VOC concentration in the exhaust gases was more than 25 ppm (as isobutylene); and
- b. a log of the downtime for the capture (collection) system, carbon adsorber, and monitoring equipment when the associated emissions unit was in operation.

These records shall be maintained at the facility for a period of three years.

- (4) Whenever the monitored average VOC concentration of the exhaust gases from the carbon adsorber deviates from the limit/range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:



- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the VOC concentration of the exhaust gases from the carbon adsorber immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (5) The permittee shall collect and record the following information for each day for this emissions unit when operating scenario #1 is being employed:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The VOC content of each coating, in pounds per gallon.
  - d. The total potential (prior to applying the booth/oven "split") daily VOC emission rate for all coatings, in pounds per day, i.e., the summation of d)(5)b x d)(5)c for all of the coatings employed.
  - e. The total VOC emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in b)(2)b., which is 80%), in pounds per day.
- (6) The permittee shall collect and record the following information for each day for the coating operation when operating scenario #2 is being employed:



- a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The VOC content of each coating, in pounds per gallon.
  - d. The total uncontrolled (prior to applying the booth/oven "split") VOC emission rate for all coatings, in pounds per day, i.e., the summation of d)(6)b x d)(6)c for all of the coatings employed.
  - e. The total uncontrolled VOC emission rate for all coatings, i.e., the value from d)(6)d multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in b)(2)b., which is 80%), in pounds per day.
  - f. The total controlled VOC emission rate for all coatings, in pounds per day, i.e., the value from d)(6)e multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- (7) The permittee shall collect and record the following information for each day for the coating operation when operating scenario #3 is being employed:
- a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The VOC content of each coating, in pounds per gallon.
  - d. The total VOC emission rate for all coatings, in pounds per day, i.e., the summation of d)(7)b x d)(7)c for all of coatings employed.
- (8) The permittee shall collect and record the following information for each day for the coating operation when operating scenario #4 is being employed:
- a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The VOC content of each coating, in pounds per gallon.
  - d. The total uncontrolled VOC emission rate for all coatings, in pounds per day, i.e., the summation of d)(8)b x d)(8)c for all of coatings employed.
  - e. The total controlled VOC emission rate for all coatings, in pounds per day, i.e., the value from d)(8)d multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
- (9) The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
- a. the company identification for each cleanup material employed;



- b. the number of gallons of each cleanup material employed;
- c. the VOC content of each cleanup material, in pounds per gallon; and
- d. The total VOC emission rate for all cleanup materials, in tons per year, i.e., the summation of  $d)(9)b \times d)(9)c / (2000 \text{ lbs/ton})$  for all of cleanup materials employed.

The permit to install for this emissions unit K006 was evaluated based on the actual materials (coating materials) employed, and the design parameters of the emissions units exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarized the results of the modeling for the "worst-case" pollutant(s).

Pollutant: Xylene

TLV (ppm): 100

Maximum Hourly Emission Rate (lbs/hr): 1.02

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 132.4

MAGLC (ug/m3): 10,338.8

Pollutant: Methyl Ethyl Ketone

TLV (ppm): 200

Maximum Hourly Emission Rate (lbs/hr): 1.27

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 164.8

MAGLC (ug/m3): 14,044.2

Pollutant: 2-Ethoxyethyl Acetate

TLV (ppm): 5

Maximum Hourly Emission Rate (lbs/hr): 1.18

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 153.1

MAGLC (ug/m3): 634.9



Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the Permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of the new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
  - d. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
- (10) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date



identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall identify in the annual permit evaluation report all three hour blocks of time, when the emissions unit was in operation under operating scenario #2 or #4, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water.
  - (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the carbon adsorber during the 12-month reporting period for this emissions unit:
    - a. each period of time (start time and date, and end time and date) when the average VOC concentration of the exhaust gases from the carbon adsorber exceeded the acceptable limit;
    - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation under operating scenario #2 or #4 and the process emissions were not vented to the carbon adsorber;
    - c. each incident of deviation described in e)(3)a or e)(3)b (above) where a prompt investigation was not conducted;
    - d. each incident of deviation described in e)(3)a or e)(3)b where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the VOC concentration of the exhaust gases into compliance with the acceptable limit, was determined to be necessary and was not taken; and
    - e. each incident of deviation described in e)(3)a or e)(3)b where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
  - (4) The permittee shall identify in the annual permit evaluation report an identification of each day during which the VOC emissions exceeded 30 pounds per day, and the actual VOC emissions for each such day.
  - (5) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.
- f) Testing Requirements
- (1) Compliance with the allowable emission limitations in b)(1) shall be determined in accordance with the following methods:
    - a. Emission Limitation:  
  
VOC emissions from this emissions unit shall not exceed 30 lbs/day, excluding cleanup.



Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(5) through d)(8).

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 7.2 TPY, including cleanup.

Applicable Compliance Method:

Compliance shall be determined by summing the daily VOC emission rates for coatings for the year and dividing by 2000 lbs/ton and adding this value to the cleanup material emissions value based upon the record keeping specified in d)(9).

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted during the calendar years 2012 and 2017.
- b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for VOC.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 18 of 40 CFR Part 60, Appendix A and Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, before and after the carbon adsorber, to demonstrate compliance with the destruction efficiency for VOC emissions.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.



- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- g) **Miscellaneous Requirements**
- (1) The terms for emissions unit K006 in this permit supercede those identified in PTI 08-04716 issued 1/10/2006 and represent no increase in emissions.



**2. P006, Chain-on-Edge Curing Oven**

**Operations, Property and/or Equipment Description:**

Infrared Oven with Cooling Chamber

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 operations(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. 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)	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 2.2 lbs/hr, 15 lbs/day and 2.74 tons per year (TPY).
b.	OAC rule 3745-21-07(M)(4)	The hourly VOC limit specified by this rule is more stringent than that specified by OAC rule 3745-31-05(A)(3).  The daily VOC limit specified by this rule is equivalent to that specified by OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. For purposes of calculating the VOC emission rates for this emissions unit and the associated spray booth (K006), the permittee shall utilize a value of 80% as the maximum percentage of the VOCs employed in the spray booth that are emitted from the spray booth. The remaining 20% of the VOCs employed in the



spray booth shall be considered to be the emissions for this emissions unit. This "split" of VOC emissions between this emissions unit and the associated spray booth is based upon average coating operation data.

- b. The hourly VOC emissions limit was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation.
- c. This emissions unit is permitted at its potential to emit, as defined in OAC rule 3745-31-01, for all pollutants.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The VOC content of each coating, in pounds per gallon.
  - d. The total potential (prior to applying the booth/oven "split") daily VOC emission rate for all coatings, in pounds per day, i.e., the summation of d)(1)b x d)(1)c for all of the coatings employed.
  - e. The total VOC emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in b)(2)a., which is 20%), in pounds per day.

- (2) The permit to install for this emissions unit K006 was evaluated based on the actual materials (coating materials) employed, and the design parameters of the emissions units exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarized the results of the modeling for the "worst-case" pollutant(s).

Pollutant: 2-Ethoxyethyl Acetate

TLV (ppm): 5

Maximum Hourly Emission Rate (lb/hr): 0.24



Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 10.09

MAGLC (ug/m3): 634.9

Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the Permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of the new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
  - d. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.
- (3) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.



e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual permit evaluation report an identification of each day during which the VOC emissions exceeded 15 pounds per day, and the actual VOC emissions for each such day.
- (3) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

f) Testing Requirements

- (1) Compliance with the allowable emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 2.2 lbs/hr.

Applicable Compliance Method:

The emissions limitation is based upon the highest hourly emissions rate for the worst-case coating and usage rate.

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 15 lbs/day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

c. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 2.74 TPY.

Applicable Compliance Method:

Compliance shall be determined by summing the daily VOC emission rates for coatings for the year and dividing by 2000 lbs/ton.

g) Miscellaneous Requirements

- (1) The terms for emissions unit P006 in this permit supercede those identified in PTI 08-04716 issued 1/10/2006 and represent no increase in emissions.