

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **08-04716**

A. Source Description

Jafe Decorating Co., Inc., 0819070215, applies a variety of coatings to the surface of glassware to form decorative or utilitarian patterns. Jafe has submitted this PTI application to increase coating usage rates for the Chain-on-Edge Paint Booth K006 and its associated Infared Oven P006. By doing so, Jafe cannot remain in compliance with the existing permit limits 8 lbs/hr and 40 lbs/day for K006 (from OAC rule 3745-21-07(G)(2)) and 3 lbs/hr and 15 lbs/day for P006 (OAC rule 3745-21-07(G)(1)). Thus, Jafe is proposing to install a permanent total enclosure (PTE) around K006 and P006 and venting the OC emissions to a carbon adsorption unit.

B. Facility Emissions and Attainment Status

The facility is located in Darke County, which is attainment for all major criteria pollutants. The facility is currently classified as a Synthetic Minor facility. Without federally enforceable restrictions in place, the facility's potential organic compound (OC) emissions are 135.41 tons per year (TPY).

C. Source Emissions

After obtaining this Synthetic Minor PTI 08-04716, the facility will no longer be classified as a major stationary source, with federally enforceable restrictions in place, the facility's potential OC emissions are 59.24 TPY.

D. Conclusion

The terms and conditions in this Synthetic Minor Permit to Install will limit the facility to less than the major source threshold for OC emissions (100 TPY). Therefore, the facility is not considered a major stationary source for Title V applicability. Potential emissions have been limited through the use of a permanent total enclosure with a carbon adsorption emissions control unit and through the inclusion of appropriate monitoring, record keeping and reporting requirements.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: DRAFT PERMIT TO INSTALL

DARKE COUNTY

Application No: 08-04716

Fac ID: 0819070215

DATE: 11/22/2005

Jafe Decorating Co Inc
Steven Curtis
P.O. Box 1232
Fairborn, OH 45324-0000

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

DARKE COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 08-04716 FOR AN AIR CONTAMINANT SOURCE FOR
Jafe Decorating Co Inc**

On 11/22/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Jafe Decorating Co Inc**, located at **1250 Martin, Greenville, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 08-04716:

chapter 31 modification to 08-04375 issued 9/30/04 removing K002, P006 and replacing 08-04519 issued 9/30/03 to change coating mix and configuration, plus installation of emissions control unit.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

John Paul, Regional Air Pollution Control Agency, 117 South Main street, Dayton, OH 45422-12084
[(937)225-4435]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 08-04716

Application Number: 08-04716
Facility ID: 0819070215
Permit Fee: **To be entered upon final issuance**
Name of Facility: Jafe Decorating Co Inc
Person to Contact: Steven Curtis
Address: P.O. Box 1232
Fairborn, OH 45324-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1250 Martin
Greenville, Ohio**

Description of proposed emissions unit(s):
Chapter 31 modification to 08-04375 issued 9/30/04 removing K002, P006 and replacing 08-04519 issued 9/30/03 to change coating mix and configuration, plus installation of emissions control unit.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

Jafe Decorating Co Inc**PTI Application: 08-04716****Issued: To be entered upon final issuance****Facility ID: 0819070215**

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

1.2.3.4.a.b.c.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	10.04

OAC rule 3745-21-07(G)(6)

The hourly and daily OC limits specified by this rule for operating scenarios #1, #2, #3, and #4 are equivalent to that specified by OAC rule 3745-31-05(A)(3).

See A.2.d.

2. Additional Terms and Conditions

- 2.a** Emission unit K006 is capable of operating under five different scenarios. The permittee shall employ only one of the following operating scenarios on any one given day:
- 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.
 - v. operating scenario #5: coating operation utilizing Dupont Tyzor TPT when the cure oven, P006, is not being employed and the carbon adsorber is being employed.
- 2.b** When operating scenario #1 or #2 is being employed:
For purposes of calculating the organic compound emission rates for this emissions unit, K006 and the associated oven, emissions unit P006, the permittee shall utilize a value of 80% of the organic compounds employed in this emission unit are emitted from emissions unit K006. The remaining 20% of the organic compounds 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.
- 2.c** When the operating scenario #3, #4 or #5 is being employed:
For the purposes of calculating organic compound 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 above.
- 2.d** When the operating scenario #2, #4 or #5 is being employed:

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

B. Operational Restrictions

1. The permanent total enclosure (PTE)* serving this emissions unit shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204, whenever the emissions unit is in operation. The PTE shall meet the following criteria:
 - a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each OC emission point;
 - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;
 - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
 - e. all OC emissions must be captured and contained for discharge through the OC control device.

By satisfying the criteria above for establishing permanent total enclosure, the total organic capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. When the operating scenario #2, #4 or #5 is being employed:
The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a 3-hour average, whenever the emissions unit is in operation.

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Emissions Unit ID: K006

3. When the operating scenario #2, #4 or #5 is being employed:
The average OC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed 25 ppm.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall install, maintain and operate monitoring devices and a recorder that simultaneously measures and records the differential pressure between the inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

When the operating scenario #2, #4 or #5 is being employed, the permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

2. The permittee shall install, operate and maintain a continuous organic monitoring device and recorder which measures and records the OC concentrations in the exhaust gases from the carbon adsorber when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the OC concentration. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

When the operating scenario #2, #4 or #5 is being employed, the permittee shall collect and record the following information each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average OC concentration in the exhaust gases was more than 25 ppm.
3. 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 and cleanup material employed.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The OC content of each coating and cleanup material, in pounds per gallon.
 - d. The total OC emission rate for all cleanup materials, in pounds per day, i.e., the summation of (b) x (c) for all of the cleanup materials employed.

- e. The total potential (prior to applying the booth/oven "split") daily OC emission rate for all coatings, in pounds per day, i.e., the summation of (b) x (c) for all of the coatings employed.
 - f. The total OC emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.2.b. of this permit), in pounds per day.
 - g. The total OC emission rate for all coatings and cleanup materials, in pounds per day [i.e., the sum of the figures from items (d) and (f)].
 - h. The total number of hours the emissions unit was in operation.
 - i. The average hourly OC emission rate for the coatings and cleanup materials, i.e., (g)/(h), in pounds per hour (average).
4. 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 and cleanup material employed.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The OC content of each coating and cleanup material, in pounds per gallon.
 - d. The total uncontrolled OC emission rate for all cleanup materials, in pounds per day, i.e., the summation of (b) x (c) for all of the cleanup materials employed.
 - e. The total uncontrolled (prior to applying the booth/oven "split") OC emission rate for all coatings, in pounds per day, i.e., the summation of (b) x (d) for all of the coatings employed.
 - f. The total uncontrolled OC emission rate for all coatings, i.e., the value from (e) multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.2.b. of this permit), in pounds per day.
 - g. The total controlled OC emission rate for all coatings, in pounds per day, i.e., the value from (f) multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
 - h. The total OC emission rate for all coatings and cleanup materials, in pounds per day, i.e., (d) + (g).
 - i. The total number of hours the emissions unit was in operation.

Ground-Level Concentration (MAGLC). The following summarized the results of the modeling for the "worst-case" pollutant(s).

Pollutant: Ethyl Acrylate

TLV(ppm): 5

Maximum Hourly Emission Rate (lbs/hr): 11 (includes K006 and P006)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 383.5 (includes K006 and P006)

MAGLC(ug/m3): 487.4

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.).

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.

9. 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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports in accordance with the General Terms and Conditions that identify the following:
 - a. All 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
 - b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average OC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
 - c. An identification of each day during which the permittee was operating under scenario #1, #2, #3 or #4, when the average hourly OC emissions exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - d. An identification of each day during which the permittee was operating under scenario #1, #2, #3 or #4, when the OC emissions exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - e. An identification of each day during which the permittee was operating under scenario #5, when the average hourly OC emissions exceeded 1.9 pounds per hour, and the actual average hourly OC emissions for each such day.
 - f. An identification of each day during which the permittee was operating under scenario #5, when the OC emissions exceeded 45.6 pounds per day, and the actual OC emissions for each such day.
 - g. An identification of each day during which the permittee was operating under scenario #5, when the OC emissions exceeded the rolling, 365-day OC emission limitation of 7.3 tons per year.

- h. An identification of each day when the permittee operated under more than one operating scenario.
- 2. The permittee shall also submit to the Director quarterly summaries that include a log of the downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- 3. The permittee shall submit an annual report of the OC emissions, in TPY, from each operating scenario. The report shall be submitted to the Regional Air Pollution Control Agency by January 15 of each calendar year.

E. Testing Requirements

- 1. Compliance with the allowable emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
8 lbs/hr OC from operating scenarios #1, #2, #3, and #4.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Sections C.3 through C.6.
 - b. Emission Limitation:
40 lbs/day OC from operating scenarios #1, #2, #3, and #4.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Sections C.3 through C.6.
 - c. Emission Limitation:
7.3 TPY OC from operating scenarios #1, #2, #3, and #4.

Applicable Compliance Method:
Compliance shall be determined by summing the daily OC emission rates for the 365-day period and dividing by 2000 lbs/ton.
 - d. Emission Limitation:
1.9 lbs/hr OC from operating scenario #5.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section C.7.
 - e. Emission Limitation:
45.6 lbs/day OC from operating scenario #5.

Jafe Decorating Co Inc

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Issued: To be entered upon final issuance

Facility ID: 0819070215

Emissions Unit ID: K006

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section C.7.

f. Emission Limitation:

7.3 TPY OC per rolling 365-day period from operating scenario #5

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section C.7.

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 within 180 days after start-up.

b. The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission rate for OC and overall control efficiency limitation for OC.

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 organic compounds.

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.

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Emissions Unit ID: K006

- 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.

F. Miscellaneous Requirements

- 1. * The terms for emissions unit K006 in this permit supercede those identified in PTI 08-04519 issued 9/30/2003 and represents no increase in emissions.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P006 - Infrared Oven with Cooling Chamber * Modification	OAC rule 3745-31-05(A)(3) OAC rule 3745-21-07(G)(1)	The organic compound (OC) emissions from this emissions unit shall not exceed 3 lbs/hr, 15 lbs/day and 2.74 tons per year (TPY). The hourly and daily OC limits specified by this rule are equivalent to that specified by OAC rule 3745-31-05.

2. Additional Terms and Conditions

- 2.a Emission unit P006 is capable of operating under two different scenarios. The permittee shall employ only one of the following operating scenarios on any one given day:
 - 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.
- 2.b For purposes of calculating the OC 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 OCs employed in the spray booth that are emitted from the spray booth. The remaining 20% of the OCs employed in the spray booth shall be considered to be the emissions for this emissions unit. This "split" of OC emissions between this emissions unit and the associated spray booth is based upon average coating operation data.

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- 2.c** When the operating scenario #2 is being employed:
The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure (PTE) with a 100 percent capture efficiency and a removal/destruction efficiency of at least 90%, by weight, for OC.

B. Operational Restrictions

1. The permanent total enclosure (PTE)* serving this emissions unit shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204, whenever the emissions unit is in operation. The PTE shall meet the following criteria:
 - a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each OC emission point;
 - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;
 - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
 - e. all OC emissions must be captured and contained for discharge through the OC control device.

By satisfying the criteria above for establishing permanent total enclosure, the total organic capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. When the operating scenario #2, #4 or #5 is being employed:
The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a 3-hour average, whenever the emissions unit is in operation.

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3. When the operating scenario #2, #4 or #5 is being employed:
The average OC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed 25 ppm.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall install, maintain and operate monitoring devices and a recorder that simultaneously measures and records the differential pressure between the inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

When the operating scenario #2, #4 or #5 is being employed, the permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

2. The permittee shall install, operate and maintain a continuous organic monitoring device and recorder which measures and records the OC concentrations in the exhaust gases from the carbon adsorber when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the OC concentration. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

When the operating scenario #2, #4 or #5 is being employed, the permittee shall collect and record the following information each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average OC concentration in the exhaust gases was more than 25 ppm.
3. 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 and cleanup material employed.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The OC content of each coating and cleanup material, in pounds per gallon.
 - d. The total OC emission rate for all cleanup materials, in pounds per day, i.e., the summation of (b) x (c) for all of the cleanup materials employed.

- e. The total potential (prior to applying the booth/oven "split") daily OC emission rate for all coatings, in pounds per day, i.e., the summation of (b) x (c) for all of the coatings employed.
 - f. The total OC emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.2.b. of this permit), in pounds per day.
 - g. The total OC emission rate for all coatings and cleanup materials, in pounds per day [i.e., the sum of the figures from items (d) and (f)].
 - h. The total number of hours the emissions unit was in operation.
 - i. The average hourly OC emission rate for the coatings and cleanup materials, i.e., (g)/(h), in pounds per hour (average).
4. 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 and cleanup material employed.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The OC content of each coating and cleanup material, in pounds per gallon.
 - d. The total uncontrolled OC emission rate for all cleanup materials, in pounds per day, i.e., the summation of (b) x (c) for all of the cleanup materials employed.
 - e. The total uncontrolled (prior to applying the booth/oven "split") OC emission rate for all coatings, in pounds per day, i.e., the summation of (b) x (d) for all of the coatings employed.
 - f. The total uncontrolled OC emission rate for all coatings, i.e., the value from (e) multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.2.b. of this permit), in pounds per day.
 - g. The total controlled OC emission rate for all coatings, in pounds per day, i.e., the value from (f) multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
 - h. The total OC emission rate for all coatings and cleanup materials, in pounds per day, i.e., (d) + (g).
 - i. The total number of hours the emissions unit was in operation.

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- j. The average hourly OC emission rate for all coatings and cleanup materials, i.e., (h)/(i), in pounds per hour (average).
8. The permit to install for this emissions unit P006 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: Ethyl Acrylate

TLV(ppm): 5

Maximum Hourly Emission Rate (lbs/hr): 11 (includes K006 and P006)

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 383.5 (includes K006 and P006)

MAGLC(ug/m3): 487.4

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.).

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.

9. 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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports in accordance with the General Terms and Conditions that identify the following:
 - a. All 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
 - b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average OC concentration of the exhaust gases from the carbon adsorber exceeded the concentration limitation specified above.
 - c. An identification of each day during which the average hourly OC emissions exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day.
 - d. An identification of each day during which the OC emissions exceeded 15 pounds per day, and the actual OC emissions for each such day.

- e. An identification of each day when the permittee operated under more than one operating scenario.
2. The permittee shall also submit to the Director quarterly summaries that include a log of the downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall submit an annual report of the OC emissions, in TPY, from each operating scenario. The report shall be submitted to the Regional Air Pollution Control Agency by January 15 of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
3 lbs/hr OC.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Sections C.3 and C.4.
 - b. Emission Limitation:
15 lbs/day OC.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Sections C.3 and C.4.
 - c. Emission Limitation:
2.74 TPY OC

Applicable Compliance Method -
Compliance shall be determined by summing the daily OC emission rates for the 365-day period and dividing by 2000 lbs/ton.
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 within 180 days after start-up.
 - b. The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission rate for OC and overall control efficiency limitation for OC.

- 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 organic compounds.

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.

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- 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.

F. Miscellaneous Requirements

1. * The terms for emissions unit P006 in this permit supercede those identified in PTI 08-0375 issued 9/30/2004 and represents no increase in emissions.