



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

11/23/05

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate

K001 (Paint Booth) Paint booth

Kimble Fabricating Co. (06-79-00-0305)
Phil E. Raber
3211 Brightwood Rd.
Midvale, OH 44653

RECEIVED

NOV 29 2005

OHIO ENVIRONMENTAL
PROTECTION AGENCY
SOUTHEAST DISTRICT

Dear Phil E. Raber:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions, please contact Southeast District Office.

Sincerely,

Michael W. Ahern

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

cc: Southeast District Office



State of Ohio Environmental Protection Agency

Final Permit To Operate An Emissions Unit

Effective Date: 11/23/05

Expiration Date: 11/23/10

This document constitutes issuance to:

Facility ID: 06-79-00-0305
Kimble Fabricating Co.
3211 Brightwood Rd.
Midvale, OH 44653

of a permit to operate for:

K001 (Paint Booth)
Paint booth

You will be contacted six months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. This permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Joseph P. Koncelik
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping 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.)

4. 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 the permit. Such records may be maintained in computerized form.

5. 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, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal 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.

6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

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

8. 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.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

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

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Paint booth # 1	OAC rule 3745-31-05(A)(3) PTI # 06-07645	Emissions of volatile organic compounds (VOC) shall not exceed 14.0 lb/hr. Particulate emissions shall not exceed 2.5 tons per year. Total emissions of VOC from K001 and K002, combined, shall not exceed 58.4 tons during any 12-month period.
	OAC rule 3745-35-07(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-35-07(B), 3745-21-09 (U)(1)(d), 3745-17-11(B) and 3745-17-07(A). Emissions of any single hazardous air pollutant (HAP) from this facility shall be less than 9.9 tons as a rolling, 12-month summation.
	OAC rule 3745-21-09 (U)(1)(d)	Emissions of any combination of HAPs from this facility shall be less than 18.4 tons as a rolling, 12-month summation. The VOC content of all metal coatings employed shall not exceed 3.5 pounds VOC per gallon (excluding water and exempt solvents) as a daily, volume-weighted average.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.551 pound per hour.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six minute average, at any time.

2. Additional Terms and Conditions

None

B. Operational Restrictions

1. The total maximum annual coating usage for emissions units K001 and K002, combined, shall not exceed 26,900 gallons, based upon a rolling, 12-month summation.
2. The total maximum annual usage of cleanup solvent for emissions units K001 and K002, combined, shall not exceed 3000 gallons, based upon a rolling, 12-month summation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day during which the coating line uses any coating which exceeds 3.5 pounds VOC per gallon:
 - a. The name and identification number of each metal coating, as applied.
 - b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each metal coating, as applied.
 - c. The daily volume-weighted average VOC content of all metal coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
2. The permittee shall collect and record the following information each month for all coatings and cleanup materials employed in emissions units K001 and K002, combined:
 - a. the name and identification of each coating and cleanup material;
 - b. the number of gallons of coatings;
 - c. the number of gallons of cleanup materials;
 - d. the VOC content, as applied, in pounds per gallon;
 - e. the individual HAP content, for each HAP, in pounds per gallon;
 - f. total HAP content, in pounds per gallon;
 - g. the total VOC emissions from all coatings and cleanup materials employed [the sum of (b. times d.) for all coatings plus (c. times d.) for all cleanup materials] divided by 2000, in tons;
 - h. the individual HAP emissions from all coatings and cleanup materials employed [the sum of (b. times e.), for each HAP in all coatings plus (c. times e.) for each HAP in all cleanup materials] divided by 2000, in tons;
 - i. the total HAP emissions from all coatings and cleanup materials employed [the sum of (b. times f.) for all coatings plus (c. times f.) for all cleanup materials] divided by 2000, in tons;
 - j. the rolling, 12-month summation of the coating usage figures; and
 - k. the rolling, 12-month summation of the cleanup material usage figures.

The permittee has sufficient monthly records of coatings usage to begin calculating the rolling, 12-month summation upon final issuance of this permit.

C. Monitoring and/or Record Keeping Requirements (continued)

3. The permit to install for this emissions unit (K001) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methyl isobutyl ketone

TLV (mg/m³): 204.83

Maximum Hourly Emission Rate (lbs/hr): 3.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 550.2

MAGLC (ug/m³): 4877

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification 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:
- Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of 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;
 - 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
 - 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

5. 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 description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 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 notify the Southeast District Office in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the exceedance occurs.

D. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating or cleanup materials usage limitations. These reports shall be sent to the Southeast District Office within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports which include the following information:
 - a. the total emissions of VOC from emissions units K001 and K002, combined, in tons;
 - b. the total emissions of each individual HAP from emissions units K001 and K002, combined, in tons; and
 - c. the total emissions of all HAP from emissions units K001 and K002, combined, in tons.

These reports shall be submitted by January 31 of each year and shall include information for each 12-month summation recorded during the previous calendar year.

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

1.a Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 14.0 lb/hr.

Applicable Compliance Method:

The emission limitations represent the maximum potential of the emissions unit as determined by multiplying the maximum coating VOC content by the maximum usage rate for that coating.
 $(4 \text{ gal/hr})(3.5 \text{ lbs/gal}) = 14.0 \text{ lbs/hr}$

1.b Emission Limitation:

Total emissions of VOC from K001 and K002, combined, shall not exceed 58.4 tons during any 12-month period.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections C.1 and C.2 of this permit. Initial compliance was determined by multiplying the maximum coating VOC content by the operational limit of 26,900 gallons per year and adding the projected maximum cleanup solvent usage multiplied by the solvent density.

$$[(3.5 \text{ lbs/gal})(26,900 \text{ gal/yr}) + (3000 \text{ gal/yr})(7.5 \text{ lb/gal})](0.0005 \text{ ton/lb}) = 58.3 \text{ tons/yr}$$

1.c Emission Limitation:

Emissions of any single hazardous air pollutant (HAP) from this facility shall be less than 9.9 tons as a rolling, 12-month summation.

Emissions of any combination of HAPs from this facility shall be less than 18.4 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section C.2 of this permit.

1.d Emission Limitation:

The VOC content of all metal coatings employed shall not exceed 3.5 pounds VOC per gallon (excluding water and exempt solvents) as a daily, volume-weighted average.

Applicable Compliance Method:

Compliance with the VOC content limitation of 3.5 pounds VOC per gallon of coating shall be based upon the record keeping specified in Sections C.1 and C.2. of this permit.

E. Testing Requirements (continued)

1.e Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.

1.f Emission Limitation:

Particulate emissions shall not exceed 0.551 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by the following equation:

$(\text{max usage rate})(\text{coating density})(\text{solids fraction})(1-\text{transfer efficiency})(1-\text{control efficiency})$

Currently: $(4 \text{ gal/hr})(15.69 \text{ lbs/gal})(0.59 \text{ solids})(0.50 \text{ transfer})(0.02 \text{ control}) = 0.37 \text{ lb/hr}$

1.g Emission Limitation:

Particulate emissions shall not exceed 2.5 tons per year.

Applicable Compliance Method:

Compliance shall be determined by the summation of the results of the following equation for each coating:

$(\text{annual usage})(\text{coating density})(\text{solids fraction})(1-\text{transfer efficiency})(1-\text{control efficiency})(0.0005 \text{ ton/lb}) = \text{TPY}$

1.h Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six minute average, at any time.

Applicable Compliance Method:

If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

F. Miscellaneous Requirements

None

