



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
ROSS COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 06-07366

DATE: 3/4/2004

Vitaoe Industries Inc.
Larry Vitaoe
PO Box 224
Chillicothe, OH 45601-0224

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it 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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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. 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

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 3/4/2004
Effective Date: 3/4/2004**

FINAL PERMIT TO INSTALL 06-07366

Application Number: 06-07366
APS Premise Number: 0671010143
Permit Fee: **\$800**
Name of Facility: Vitatoe Industries Inc.
Person to Contact: Larry Vitatoe
Address: PO Box 224
Chillicothe, OH 45601-0224

Location of proposed air contaminant source(s) [emissions unit(s)]:

**100 Chamber Dr.
Chillicothe, Ohio**

Description of proposed emissions unit(s):

Chapter 31 Modification to booths K001 and K002 to form a coating line 1.

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, 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

Vitaoe Industries Inc.
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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.

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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.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	99.4
PE	4.8

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.

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

K005 - Coating Line No. 1 consisting of former spray booth 1 and spray booth 2 converted to drying oven. Chapter 31 Modification. (This PTI supersedes PTI 06-5895 issued Final on 11/24/1999.)

OAC rule 3745-31-05(A)(3)

OAC rule 3745-21-09(U)(1)(c)

OAC rule 3745-17-11

OAC rule 3745-35-07(B)

Applicable Emissions
Limitations/Control Measures

Volatile Organic Compound (VOC) emissions shall not exceed 24.0 lbs/hr as a daily average.

OAC rule 3745-17-07(B)(1)

There shall be no visible particulate emissions (PE) from the exhaust stacks.

OAC rule 3745-21-07 (G)(2)

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c), OAC rule 3745-17-11, and OAC rule 3745-35-07(B).

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average).

PE shall not exceed 0.551 lb/hr and 2.4 tons/year. See Section A.I.2.b. below.

VOC emissions from K005 and K006 shall not exceed 99.4 tons per rolling 12-month period.

Total HAP emissions from K005 and K006 shall not exceed 24.9 tons per rolling 12-month period.

Individual HAP emissions from K005 and K006 shall not exceed 9.9 tons per rolling 12-month period.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See Section A.I.2.a. below.

2. Additional Terms and Conditions

- 2.a** The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
- 2.b** The best available control technology for the control of PE from this source is to employ a dry filter media system.

B. Operational Restrictions

- 1.** The maximum coating material usage for K005, and K006 combined shall not cause the emissions to exceed 99.4 tons of VOC per rolling, 12-month period, calculated using the following formula:

$$99.4 \text{ tons VOC} \geq \sum_{n=1}^i \frac{(P_i) \times (\text{VOC}_i)}{2000}$$

where:

P_i = Usage of coating materials "i" in gallons or pounds (percent by mass weight of solvent contained within a gallon of coating material);

VOC_i = VOC content of coating materials "i" in pounds per gallon** or percent by weight;**

**this assumes when using pounds per gallon or percent by weight units, 100% of the organic solvent is emitted.

- 2.** The combined maximum annual VOC, Total HAPs, and Individual HAPs emission rates for emissions units K005 and K006 shall not exceed 99.4, 24.9, and 9.9 tons per year respectively, based upon a rolling, 12-month summation of the emission rates. To ensure enforceability during the first 12 calendar months of operation following the startup of emissions units K005 and K006, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC Usage/Emissions (Tons)</u>	<u>Maximum Allowable Cumulative Total HAPs Usage/Emissions (Tons)</u>	<u>Maximum Allowable Cumulative Individual HAPs Usage/ Emissions (Tons)</u>
1	8.3	2.1	0.9
1-2	16.6	4.2	1.7
1-3	24.9	6.3	2.6
1-4	33.2	8.4	3.4
1-5	41.5	10.5	4.3
1-6	49.8	12.6	5.1
1-7	58.1	14.7	6.0
1-8	66.4	16.8	6.8
1-9	74.7	18.9	7.7
1-10	83.0	20.9	8.5
1-11	91.3	22.9	9.4
1-12	99.4	24.9	9.9

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual VOC, Total HAPs, and Individual HAPs emission limitations shall be based upon a rolling, 12-month summation of the monthly usage/emissions figures.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each day for materials used in the emission unit:
 - a. The company identification of each coating and cleanup material employed;
 - b. The total number of gallons of each coating and cleanup material employed;
 - c. The VOC content of each coating and cleanup material, in pounds per gallon, excluding water and exempt solvents;
 - d. The total VOC emission rate in pounds (the sum of b. times c. for all coatings employed);
 - e. The total number of hours the emissions unit was in operation;
 - f. The calculated average hourly VOC emission rate in pounds per hour, based upon the total daily coatings and cleanup materials employed, and the actual hours of operation of the emission unit,

i.e., d./e.; and

- g. Documentation for each coating and cleanup material as to whether it is or is not a photochemically reactive material as defined by OAC rule 3745-21-01(C)(5).

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

- 2. The permittee shall collect and record the following information each month for the line:
 - a. The name and identification number of each coating, and cleanup material employed;
 - b. The VOC content of each coating (excluding water and exempt solvents), and cleanup material, in pounds per gallon;
 - c. The total HAP content of each coating, and cleanup material, in pounds per gallon;
 - d. The individual HAP content of each coating, and cleanup material, in pounds per gallon;
 - e. The number of gallons of each coating, and cleanup material employed;
 - f. The total VOC emissions (VOC applied) from all coatings, and cleanup materials employed [the sum of (1.b. times 1.e. divided by 2000 lb/ton) for all coatings and cleanup materials], in tons;
 - g. The total HAP emissions (HAP applied) from all coatings and cleanup materials employed, in tons;
 - h. The individual HAP emissions (HAP applied) from all coatings, and cleanup materials employed, in tons;
 - i. The rolling, 12-month summation of the VOC emissions, in tons;
 - j. The rolling, 12-month summation of the total HAP emissions, in tons;
 - k. The rolling, 12-month summation of the individual HAP emissions, in tons, and
 - l. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling 12-month summation of the gallons of each coating and clean-up material employed. Also, during the first 12 calendar months of operation following issuance of this permit, the

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PTI A

Issued: 3/4/2004

Emissions Unit ID: **K005**

permittee shall record the cumulative coating usage for each calendar month.

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation, and coating was being applied.
4. The permit to install for this emissions unit (K005) 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: Xylene

TLV (mg/m³): 651.3

Maximum Hourly Emission Rate (lbs/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 134

MAGLC (ug/m³): 10330

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:

- a. 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;

- 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(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. 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 notify the Ohio EPA Southeast District Office in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days following the end of the calendar month.
2. The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days after the event occurs.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling

Emissions Unit ID: **K005**

12-month VOC emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative VOC limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.

4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month Total HAPs emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative Total HAPs limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month Individual HAPs emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative Individual HAPs limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.

E. Testing Requirements

1. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 24.0 lbs/hr as a daily average.

Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements in section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.

2. Emission Limitation:

There shall be no visible particulate emissions (PE) from the exhaust stacks.

Compliance Method:

If required, compliance with the visible emissions limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emissions testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to rule 3745-15-04 (A).

3. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average).

Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

4. Emission Limitation:

VOC emissions from K005 and K006 shall not exceed 99.4 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.1. and C.2.

5. Emission Limitation:

Total HAP emissions from K005 and K006 shall not exceed 24.9 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.

6. Emission Limitation:

Individual HAP emissions from K005 and K006 shall not exceed 9.9 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.

7. Emission Limitation:

PE shall not exceed 0.551 lb/hr, 2.41 TPY

Compliance Method:

To determine the actual worst case particulate emission rate, the following equation shall be used:

$$PE = (M) * (1-TE) * (1-CE)$$

where:

PE = particulate matter emission rate (lb/hr),

M = maximum coating solids usage rate (5.4 lb/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.65 for HVLP spray guns),

CE = control efficiency of the control equipment (90% for panel filters). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

Compliance with the TPY PE emissions limitation shall be determined by multiplying the pound per hour emission rate by 8760 hours per year and 0.0005 tons per pound.

F. Miscellaneous Requirements

None

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>
K006 - Coating Line No. 2 consisting of former spray booth 3 and spray booth 4 converted to a drying oven. Chapter 31 Modification. (This PTI supercedes PTI 06-06895 issued Final on 11/24/1999.)	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(B)(1)</p> <p>OAC rule 3745-21-07 (G)(2)</p> <p>OAC rule 3745-21-09(U)(1)(c)</p> <p>OAC rule 3745-17-11</p> <p>OAC rule 3745-35-07(B)</p>

Vitato**PTI A****Issued: 3/4/2004**Emissions Unit ID: **K006**Applicable Emissions
Limitations/Control Measures

Volatile Organic Compound (VOC) emissions shall not exceed 16.0 lbs/hr as a daily average.

There shall be no visible particulate emissions (PE) from the exhaust stacks.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c), OAC rule 3745-17-11, and OAC rule 3745-35-07(B).

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average).

PE shall not exceed 0.551 lb/hr and 2.4 tons/year. See Section A.I.2.b. below.

VOC emissions from K005 and K006 shall not exceed 99.4 tons per rolling 12-month period.

Total HAP emissions from K005 and K006 shall not exceed 24.9 tons per rolling 12-month period. Individual HAP emissions from K005 and K006 shall not exceed 9.9 tons per rolling 12-month period.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See Section A.I.2.a. below.

2. Additional Terms and Conditions

- 2.a** The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
- 2.b** The best available control technology for the control of PE from this source is to employ a dry filter media system.

B. Operational Restrictions

1. The maximum coating material usage for K005, and K006 combined shall not cause the emissions to exceed 99.4 tons of VOC per rolling, 12-month period, calculated using the following formula:

$$99.4 \text{ tons VOC} \geq \sum_{n=1}^i \frac{(P_i) \times (\text{VOC}_i)}{2000}$$

where:

P_i = Usage of coating materials "i" in gallons or pounds (percent by mass weight of solvent contained within a gallon of coating material);

VOC_i = VOC content of coating materials "i" in pounds per gallon** or percent by weight;**

**this assumes when using pounds per gallon or percent by weight units, 100% of the organic solvent is emitted.

2. The combined maximum annual VOC, Total HAPs, and Individual HAPs emission rates for emissions units K005 and K006 shall not exceed 99.4, 24.9, and 9.9 tons per year respectively, based upon a rolling, 12-month summation of the emission rates. To ensure enforceability during the first 12 calendar months of operation following the startup of emissions units K005 and K006, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC Usage/Emissions (Tons)</u>	<u>Maximum Allowable Cumulative Total HAPs Usage/Emissions (Tons)</u>	<u>Maximum Allowable Cumulative Individual HAPs Usage/ Emissions (Tons)</u>
1	8.3	2.1	0.9
1-2	16.6	4.2	1.7
1-3	24.9	6.3	2.6

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Emissions Unit ID: **K006**

1-4	33.2	8.4	3.4
1-5	41.5	10.5	4.3
1-6	49.8	12.6	5.1
1-7	58.1	14.7	6.0
1-8	66.4	16.8	6.8
1-9	74.7	18.9	7.7
1-10	83.0	20.9	8.5
1-11	91.3	22.9	9.4
1-12	99.4	24.9	9.9

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual VOC, Total HAPs, and Individual HAPs emission limitations shall be based upon a rolling, 12-month summation of the monthly usage/emissions figures.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each day for materials used in the emission unit:
 - a. The company identification of each coating and cleanup material employed;
 - b. The total number of gallons of each coating and cleanup material employed;
 - c. The VOC content of each coating and cleanup material, in pounds per gallon, excluding water and exempt solvents;
 - d. The total VOC emission rate in pounds (the sum of b. times c. for all coatings employed);
 - e. The total number of hours the emissions unit was in operation;

- f. The calculated average hourly VOC emission rate in pounds per hour, based upon the total daily coatings and cleanup materials employed, and the actual hours of operation of the emission unit, i.e., d./e.; and
- g. Documentation for each coating and cleanup material as to whether it is or is not a photochemically reactive material as defined by OAC rule 3745-21-01(C)(5).

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

2. The permittee shall collect and record the following information each month for the line:
- a. The name and identification number of each coating, and cleanup material employed;
 - b. The VOC content of each coating (excluding water and exempt solvents), and cleanup material, in pounds per gallon;
 - c. The total HAP content of each coating, and cleanup material, in pounds per gallon;
 - d. The individual HAP content of each coating, and cleanup material, in pounds per gallon;
 - e. The number of gallons of each coating, and cleanup material employed;
 - f. The total VOC emissions (VOC applied) from all coatings, and cleanup materials employed [the sum of (1.b. times 1.e. divided by 2000 lb/ton) for all coatings and cleanup materials], in tons;
 - g. The total HAP emissions (HAP applied) from all coatings and cleanup materials employed, in tons;
 - h. The individual HAP emissions (HAP applied) from all coatings, and cleanup materials employed, in tons;
 - i. The rolling, 12-month summation of the VOC emissions, in tons;
 - j. The rolling, 12-month summation of the total HAP emissions, in tons;

- k. The rolling, 12-month summation of the individual HAP emissions, in tons, and
 - l. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling 12-month summation of the gallons of each coating and clean-up material employed. Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative coating usage for each calendar month.

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

- 3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation, and coating was being applied.
- 4. The permit to install for this emissions unit (K005) 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: Xylene

TLV (mg/m³): 651.3

Maximum Hourly Emission Rate (lbs/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 134

MAGLC (ug/m³): 10330

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

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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 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(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. 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 notify the Ohio EPA Southeast District Office in writing of any monthly

record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days following the end of the calendar month.

2. The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days after the event occurs.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month VOC emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative VOC limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.
4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month Total HAPs emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative Total HAPs limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month Individual HAPs emissions limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative Individual HAPs limitation set forth in Section B.1. of this permit. These reports are due by the date described in Part 1- General Terms and Conditions.

E. Testing Requirements

1. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 16.0 lbs/hr as a daily average.

Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements in section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.
2. Emission Limitation:

There shall be no visible particulate emissions (PE) from the exhaust stacks.

Compliance Method:

If required, compliance with the visible emissions limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emissions testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to rule 3745-15-04 (A).

3. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average).

Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

4. Emission Limitation:

VOC emissions from K005 and K006 shall not exceed 99.4 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.1. and C.2.

5. Emission Limitation:

Total HAP emissions from K005 and K006 shall not exceed 24.9 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.

6. Emission Limitation:

Individual HAP emissions from K005 and K006 shall not exceed 9.9 tons per rolling 12-month period.

Compliance Method:

Compliance shall be based on the record keeping required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.

7. Emission Limitation:

PE shall not exceed 0.551 lbs/hr, 2.41 TPY

Compliance Method:

To determine the actual worst case particulate emission rate, the following equation shall be used:

$$PE = (M) * (1-TE) * (1-CE)$$

where:

PE = particulate matter emission rate (lb/hr),

M = maximum coating solids usage rate (5.4 lb/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.65 for HVLP spray guns),

CE = control efficiency of the control equipment (90% for panel filters). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

Compliance with the TPY PE emissions limitation shall be determined by multiplying the pound per hour emission rate by 8760 hours per year and 0.0005 tons per pound.

F. Miscellaneous Requirements

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None