



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
WAYNE 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: 02-16207**

**DATE: 5/15/2003**

Boville Industrial Coatings Inc  
Larry Boville  
4656 Garret Drive  
Norton, OH 44203

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  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

NEDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 5/15/2003  
Effective Date: 5/15/2003**

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**FINAL PERMIT TO INSTALL 02-16207**

Application Number: 02-16207  
APS Premise Number: 0285000381  
Permit Fee: **\$2200**  
Name of Facility: Boville Industrial Coatings Inc  
Person to Contact: Larry Boville  
Address: 4656 Garret Drive  
Norton, OH 44203

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**7459 Leichty Rd  
Smithville, Ohio**

Description of proposed emissions unit(s):  
**4 paint spray booths.**

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 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

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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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**Facility ID: 0285000381**

Emissions Unit ID: **R001**

**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	85
<b>Individual HAP</b>	<b>&lt; 10</b>
<b>Total HAPs</b>	<b>&lt; 25</b>

**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

R001 - spray booth no. 1 with dry filter OAC rule 3745-31-05 (A)(3)

OAC rule 3745-35-07(B)

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

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

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

## **2. Additional Terms and Conditions**

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Record keeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning

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**Bovillo**

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solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

Emissions Unit ID: **R001**

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m <sup>3</sup> )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m <sup>3</sup> )	MAGLC (ug/m <sup>3</sup> )
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.

4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R002 - spray booth no. 2 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

## 2. Additional Terms and Conditions

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.

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**Issued**

**Facility ID: 0285000381**

**Emissions Unit ID: R002**

- i. The total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m <sup>3</sup> )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m <sup>3</sup> )	MAGLC (ug/m <sup>3</sup> )
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the

actual emissions for each such day.

3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R003 - spray booth no. 3 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

**Boville Industrial Coatings Inc**  
**PTI Application: 02-16207**  
**Issued**

**Facility ID: 0285000381**

**Emissions Unit ID: R003**

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

**2. Additional Terms and Conditions**

**2.a NONE**

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
  
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings,[i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m3)	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)	MAGLC (ug/m3)
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R004 - spray booth no. 4 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

## 2. Additional Terms and Conditions

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m3)	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)	MAGLC (ug/m3)
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R005 - spray booth no. 5 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

## **2. Additional Terms and Conditions**

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m <sup>3</sup> )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m <sup>3</sup> )	MAGLC (ug/m <sup>3</sup> )
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Boville Industrial Coatings Inc**  
**PTI Application: 02-16207**  
**Issued**

**Facility ID: 0285000381**

Emissions Unit ID: **R005**

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R006 - spray booth no. 6 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

## 2. Additional Terms and Conditions

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m <sup>3</sup> )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m <sup>3</sup> )	MAGLC (ug/m <sup>3</sup> )
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**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>
R007 - spray booth no. 7 with dry filter	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-35-07(B)
	OAC rule 3745-21-09 (U)(1)(d)
	OAC rule 3745-21-07 (G)(2)

Applicable Emissions  
Limitations/Control Measures

40 lbs organic compounds (OC)  
per day on any day when plastic  
parts are coated

65 lbs volatile organic compounds  
(VOC) per day on any day only  
metal parts are coated

11.9 tons VOC per year from the  
coating operation

1.4 tons VOC per year from  
clean-up operations facility-wide

any individual hazardous air  
pollutant (HAP), including glycols,  
less than 10 tons per year  
facility-wide

total HAPs less than 25 tons per  
year facility-wide

3.5 lbs VOC per gallon coating,  
less water and exempt solvents,  
calculated as a daily volume  
weighted average

The requirements established  
pursuant to OAC rule 3745-21-07  
(G)(2) are less stringent than the  
requirements established pursuant  
to OAC rule 3745-31-05 (A)(3).

**2. Additional Terms and Conditions**

**2.a** NONE

**B. Operational Restrictions**

NONE

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each day metal parts are coated:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating, as applied.
  - c. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .
2. The permittee shall collect and record the following information for each month for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The total number of days the emissions unit was in operation.
  - f. The average daily OC/VOC emission rate for all coatings, [i.e., (d)/(e)], in pounds per day (average).
  - g. What type of material (metal or plastic) was coated each day the emissions unit was in operation.

[Note: The coating information must be for the coatings as employed, including any thinning

solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month facility-wide:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds
  
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)<sup>1</sup> content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.
  - c. The total combined HAP content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP emissions for each HAP from all coatings and cleanup materials

employed, in pounds or tons per month and pounds or tons per year (for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material).

- j. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per year (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit R001 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	TLV (mg/m <sup>3</sup> )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1-Hour Maximum Ground-Level Concentration (ug/m <sup>3</sup> )	MAGLC (ug/m <sup>3</sup> )
Methyl n-Amyl Ketone	233.5	3.5	101.8	5,559.5
Isobutyl Acetate	712.6	0.4	11.6	16,967
Toluene	188.0	0.5	16.1	4,485
Butyl Acetate	712.6	1.6	46.3	16,967
Cyclohexanone	96.3	1.0	30.1	2,292
Methyl Ethyl Ketone	589.0	1.8	53.2	14,042

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 still 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.

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 that identify each day when the daily volume-weighted average coating exceeds 3.5 pounds VOC per gallon, less water and exempt solvents, as applied.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when plastic materials were coated and the average daily OC emissions exceeded 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each year when the total HAPs emissions met or exceeded 25 tons and the actual emissions for each such year.
6. The permittee shall submit deviation (excursion) reports that identify each year when the emissions of each individual HAP met or exceeded 10 tons and the actual emissions for each such year.
7. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

#### **Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**Emission Limitation**

3.5 lbs VOC per gallon coating, less water and exempt solvents, based upon a daily, volume weighted average

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.1.c.

**Emission Limitation**

40 lbs OC per day on any day plastic parts were coated.

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

65 lbs VOC per day on any day only metal parts were coated

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.2.f.

**Emission Limitation**

11.9 tons VOC per year from the coating operations

**Applicable Compliance Method**

Sum the daily emissions determined from the record keeping specified in II.C.2.f.

**Emission Limitation**

1.4 tons VOC per year for cleanup operations facility-wide

**Applicable Compliance Method**

Compliance shall be demonstrated based upon the record keeping specified in II.C.3.f.

**Emission Limitation**

Less than 10 tons per year for each individual HAP facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.i.

**Emission Limitation**

Less than 25 tons per year for all HAPs facility-wide

**Applicable Compliance Method**

Compliance shall be determined based upon the record keeping specified in II.C.4.j.

**F. Miscellaneous Requirements**

NONE