



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
CLERMONT 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:**

**14-05703**

**Fac ID: 1413000327**

**DATE: 6/16/2005**

3M Precision Optics  
Bryan Schroers  
4000 McMann Road  
Cincinnati, OH 45245

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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

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

Sincerely,

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

cc: USEPA

HCDES



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**Permit To Install  
Terms and Conditions**

**Issue Date: 6/16/2005  
Effective Date: 6/16/2005**

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**FINAL PERMIT TO INSTALL**

**14-05703**

Application Number: 14-05703  
Facility ID: 1413000327  
Permit Fee: **\$2000**  
Name of Facility: 3M Precision Optics  
Person to Contact: Bryan Schroers  
Address: 4000 McMann Road  
Cincinnati, OH 45245

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4000 McMann Road  
Cincinnati, Ohio**

Description of proposed emissions unit(s):  
**13 paint 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

**3M Precision Optics**  
**PTI Application: 14-05703**  
**Issued: 6/16/2005**

**Facility ID: 1413000327**

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

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

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**14. Construction Compliance Certification**

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

**15. Fees**

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

**B. Permit to Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	49.01

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R003 - Optical lens paint spray booth 2	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 0.50 lb per hour and 12.04 lbs/day, from the application of coatings only.
		OC emissions shall not exceed 10.65 lbs OC/day from cleanup materials use.
		OC emissions shall not exceed 2.06 TPY, from the application of coatings only; and OC emissions shall not exceed 1.60 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c., B.1. and B.2.
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.88 pounds of OC per gallon of coating, as applied.
- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 7.1 pounds of OC per gallon of cleanup material.
- 2.d The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

## B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 600 gallons of coatings, as applied and 450 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.50 gallons of cleanup materials.

## C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

3. The permit to install for this emissions unit R003 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 4-methyl-2-pentanone  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 0.76  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 461.4  
MAGLC (ug/m3): 4880

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R003; and the total volume, in gallons, of all cleanup materials employed in emissions unit R003 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be

**3M Precision Optics**  
**PTI Application: 14 05703**  
**Issued**

**Facility ID: 1413000327**

Emissions Unit ID: **R003**

determined in accordance with the following methods:

Emissions Limitation:

0.50 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

12.04 lbs OC/day, coatings only;  
10.65 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.06 TPY OC, coatings only;  
1.60 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-02320 issued on November 22, 1995.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R005 - Optical lens paint spray booth 5	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 0.50 lb per hour and 12.04 lbs/day, from the application of coatings only.  OC emissions shall not exceed 10.65 lbs OC/day from cleanup materials use.  OC emissions shall not exceed 2.06 TPY, from the application of coatings only; and OC emissions shall not exceed 1.60 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c., B.1. and B.2.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass

emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b** The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.88 pounds of OC per gallon of coating, as applied.
- 2.c** The OC content of each cleanup material employed in this emissions unit shall not exceed 7.1 pounds of OC per gallon of cleanup material.
- 2.d** The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

## **B. Operational Restrictions**

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 600 gallons of coatings, as applied and 450 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.50 gallons of cleanup materials.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

**3M Precision Optics**  
**PTI Application: 14-05703**  
**Issued**

**Facility ID: 1413000327**

**Emissions Unit ID: R005**

3. The permit to install for this emissions unit R005 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 4-methyl-2-pentanone  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 0.76  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 461.4  
MAGLC (ug/m3): 4880

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will 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. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R005; and the total volume, in gallons, of all cleanup materials employed in emissions unit R005 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

0.50 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

12.04 lbs OC/day, coatings only;  
10.65 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.06 TPY OC, coatings only;  
1.60 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-03363 issued on December 14, 1994.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R006 - Optical lens paint spray booth	OAC rule 3745-31-05(A)(3)	<p>Organic Compounds (OC) emissions shall not exceed 0.50 lb per hour and 12.04 lbs/day, from the application of coatings only.</p> <p>OC emissions shall not exceed 10.65 lbs OC/day from cleanup materials use.</p> <p>OC emissions shall not exceed 2.06 TPY, from the application of coatings only; and OC emissions shall not exceed 1.60 TPY from cleanup materials.</p> <p>See terms A.2.b, A.2.c., B.1. and B.2.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
	OAC rule 3745-21-07(G)(2)	

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass

Emissions Unit ID: **R006**

emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b** The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.88 pounds of OC per gallon of coating, as applied.
- 2.c** The OC content of each cleanup material employed in this emissions unit shall not exceed 7.1 pounds of OC per gallon of cleanup material.
- 2.d** The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 600 gallons of coatings, as applied and 450 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.50 gallons of cleanup materials.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

3. The permit to install for this emissions unit R006 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 4-methyl-2-pentanone  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 0.76  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 461.4  
MAGLC (ug/m3): 4880

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

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**Emissions Unit ID: R006**

evaluations to determine that the changed emissions unit will 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. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R006; and the total volume, in gallons, of all cleanup materials employed in emissions unit R006 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

0.50 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

12.04 lbs OC/day, coatings only;  
10.65 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.06 TPY OC, coatings only;  
1.60 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-03553 issued on March 15, 1995.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R008 - Optical lens paint spray booth 8	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 0.50 lb per hour and 12.04 lbs/day, from the application of coatings only.
		OC emissions shall not exceed 10.65 lbs OC/day from cleanup materials use.
		OC emissions shall not exceed 2.06 TPY, from the application of coatings only; and OC emissions shall not exceed 1.60 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c., B.1. and B.2.
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.88 pounds of OC per gallon of coating, as applied.
- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 7.1 pounds of OC per gallon of cleanup material.
- 2.d The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

## **B. Operational Restrictions**

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 600 gallons of coatings, as applied and 450 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.50 gallons of cleanup materials.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

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3. The permit to install for this emissions unit R008 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 4-methyl-2-pentanone  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 0.76  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 461.4  
MAGLC (ug/m3): 4880

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R008; and the total volume, in gallons, of all cleanup materials employed in emissions unit R008 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

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1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

0.50 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

12.04 lbs OC/day, coatings only;  
10.65 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.06 TPY OC, coatings only;  
1.60 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-04303 issued on March 5, 1997, permit to install 14-04349 issued on May 21, 1997 and permit to install 14-04854 issued on February 2, 2000.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R009 - Automatic Teflon spray booth with manual touch-up 9	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 3.71 lbs per hour and 89.0 lbs/day, from the application of coatings only.  OC emissions shall not exceed 6.8 lbs/day from cleanup materials use.  OC emissions shall not exceed 16.24 TPY, from the application of coatings only; and OC emissions shall not exceed 1.24 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms and conditions A.2.b, A.2.c and B.1- B.3.  See term and condition A.2.d.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations and usage limitations.
- 2.b The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.47 pounds of OC per gallon of coating, as applied.

- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 6.8 pounds of OC per gallon of cleanup material.
- 2.d The use of photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
- 2.e The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

- 1. The maximum annual as applied coating and cleanup material usage for this emissions unit shall not exceed 5019 gallons, as applied, for coatings and 365 gallons for cleanup materials.
- 2. The maximum daily coating usage as applied for this emissions unit shall not exceed 13.75 gallons, as applied.
- 3. The maximum daily cleanup material usage for this emissions unit shall not exceed 1 gallon.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons as applied of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and
  - e. A record of each coating, as applied, and cleanup material employed in this emissions unit, indicating whether or not the material is photochemically reactive, as defined in OAC rule 3745-21-01(C)(5).

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

2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.
3. The permit to install for this emissions unit R009 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropanol  
TLV (ug/m3): 491,500  
Maximum Hourly Emission Rate (lbs/hr): 3.71  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 368  
MAGLC (ug/m3): 11,700

Physical changes to or 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 Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total volume, in gallons, of all coatings employed in emissions unit R009 and the total volume, in gallons, of all cleanup materials employed in emissions unit R009 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emissions limitation in term and condition A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emissions limitation in term and condition A.1., and the actual organic compound emissions for each such day.

- c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
- d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in terms and conditions B.2. and B.3.

If no exceedances occurred during the reporting period then a report is required stating so.

- 3. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material (as defined in OAC rule 3745-21-01(C)(5)) was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of organic compound emissions emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
- 4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

### Emissions Limitations

3.71 lbs OC/hour, coatings only

### Applicable Compliance Method

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

### Emissions Limitations

89.0 lbs OC/day, coatings only  
6.8 lbs OC/day from cleanup materials

### Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping in term C.1.

### Emissions Limitations

16.24 TPY OC, coatings only  
1.24 TPY OC from cleanup materials

### Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by a summation of the record keeping in term C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks and coatings.

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3. Compliance with the usage limits cited in terms and conditions B.1 shall be demonstrated by the record keeping in term and condition C.2.
4. Compliance with the usage limits cited in terms and conditions A.2.d. shall be demonstrated by the record keeping in term and condition C.1.e.
5. Compliance with the usage limits cited in terms and conditions B.2. and B.3. shall be demonstrated by the record keeping in term and condition C.1.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-04963 issued on October 19, 2000 and permit to install 14-05513 issued on January 2, 2004.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R010 - Optical lens paint spray booth 10	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 0.50 lb per hour and 12.04 lbs/day, from the application of coatings only.
		OC emissions shall not exceed 10.65 lbs OC/day from cleanup materials use.
		OC emissions shall not exceed 2.06 TPY, from the application of coatings only; and OC emissions shall not exceed 1.60 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c., B.1. and B.2.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass

emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b** The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.88 pounds of OC per gallon of coating, as applied.
- 2.c** The OC content of each cleanup material employed in this emissions unit shall not exceed 7.1 pounds of OC per gallon of cleanup material.
- 2.d** The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

## **B. Operational Restrictions**

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 600 gallons of coatings, as applied and 450 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.50 gallons of cleanup materials.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

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**Facility ID: 1413000327**

**Emissions Unit ID: R010**

3. The permit to install for this emissions unit R010 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 4-methyl-2-pentanone  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 0.76  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 461.4  
MAGLC (ug/m3): 4880

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R010; and the total volume, in gallons, of all cleanup materials employed in emissions unit R010 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

**3M Precision Optics**  
**PTI Application: 14 05703**  
**Issued**

**Facility ID: 1413000327**

**Emissions Unit ID: R010**

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

0.50 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

12.04 lbs OC/day, coatings only;  
10.65 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.06 TPY OC, coatings only;  
1.60 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

- 2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
- 3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

- 1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-05073 issued on January 11, 2001 and permit to install 14-05513 issued on January 2, 2004.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R011 - Manual Teflon Coating Booth Cell 1	OAC rule 3745-31-05(A)(3)	Organic Compounds (OC) emissions shall not exceed 0.47 lb per hour and 11.32 lbs/day, from the application of coatings only.  OC emissions shall not exceed 6.80 lbs OC/day from cleanup materials use.  OC emissions shall not exceed 2.07 TPY, from the application of coatings only; and OC emissions shall not exceed 1.24 TPY from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c., B.1. and B.2.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass

Emissions Unit ID: **R011**

emission rates, coating and cleanup material OC content limitations and usage limitations.

- 2.b** The organic compound (OC) content, of each coating employed in this emissions unit shall not exceed 6.47 pounds of OC per gallon of coating, as applied.
- 2.c** The OC content of each cleanup material employed in this emissions unit shall not exceed 6.8 pounds of OC per gallon of cleanup material.
- 2.d** The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

- 1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 639 gallons of coatings, as applied and 365 gallons of cleanup materials.
- 2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons of coatings, as applied and 1.0 gallon of cleanup materials.

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

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and

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

- 2. The permittee shall maintain monthly records of the total OC emissions and the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly emissions and usage records shall be summarized at the end of each calendar year.

3. The permit to install for this emissions unit R011 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropanol  
TLV (ug/m3): 491,500  
Maximum Hourly Emission Rate (lbs/hr): 0.47  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 545  
MAGLC (ug/m3): 11,700

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will 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. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions in TPY; the total volume, in gallons, of all coatings employed in emissions unit R011; and the total volume, in gallons, of all cleanup materials employed in emissions unit R011 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded the daily emission limitation specified in Section A.1., and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in term and condition B.2.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

0.47 lb OC/hour, coatings only

Applicable Compliance Method:

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the maximum hourly coating application rate by the maximum OC content of the coatings, as provided in PTI application 14-05703, submitted March 24, 2005.

Emissions Limitations:

11.32 lbs OC/day, coatings only;  
6.80 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.1.

Emissions Limitations

2.07 TPY OC, coatings only;  
1.24 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by the record keeping required in term and condition C.2.

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks, coatings and cleanup materials.
3. Compliance with the usage limits cited in terms and conditions B.1 and B.2 shall be demonstrated by the record keeping in terms and conditions C.1. and C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-05508 issued on December 11, 2003.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R012 - Manual Teflon Coating Booth Cell 2	OAC rule 3745-31-05(A)(3)	0.45 lbs OC/hr, coatings only; 10.8 lbs OC/day, coatings only; 6.8 lbs OC/day from cleanup materials; 1.98 TPY OC, coatings only; 1.24 TPY OC from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c and B.1- B.3.  Exempt

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations, usage limitations and compliance with the Air Toxics Policy.
- 2.b The organic compound (OC) content, as applied of each coating employed in this emissions unit shall not exceed 6.47 pounds of OC per gallon of coating.
- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 6.8 pounds of OC per gallon of cleanup material.
- 2.d The hourly emission limitation(s) outlined is based upon the emissions unit’s Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 639 gallons for coatings and 365 gallons for cleanup materials.
2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons for coatings and 1 gallon for cleanup materials.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and
  - e. A record of each cleanup material employed in this emissions unit, indicating whether or not the cleanup material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

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

2. The permit to install for this emissions unit R012 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

**3M Precision Optics**  
**PTI Application: 14-05702**  
**Issued**

**Facility ID: 1413000327**

**Emissions Unit ID: R012**

Pollutant: Isopropanol  
 TLV (ug/m3): 491,500  
 Maximum Hourly Emission Rate (lbs/hr): 0.47  
 Predicted 1-Hour Maximum Ground-Level  
 Concentration (ug/m3): 545  
 MAGLC (ug/m3): 11,700

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total volume, in gallons, of all coatings employed in emissions unit R012 and the total volume, in gallons, of all cleanup materials employed in emissions unit R012 for the previous calendar year. These reports shall be submitted by January 31 of each year.
- 2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded 10.8 pounds per day, and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded 6.8 pounds per day, and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in T&Cs A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in T&Cs B.2.

If no exceedances occurred during the reporting period then a report is required stating so.

- 3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

- 1. Emissions Limitations  
  
0.45 lbs OC/hour, coatings only

**3M Precision Optics**  
**PTI Application: 14-05702**  
**Issued**

**Facility ID: 1413000327**

**Emissions Unit ID: R012**

Applicable Compliance Method

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the emission factor found in this permit to install application by the maximum hourly coating of parts.

2. Emissions Limitations

10.8 lbs OC/day, coatings only  
6.8 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping in term C.1.

3. Emissions Limitations

1.98 TPY OC, coatings only  
1.24 TPY OC from cleanup materials

#### Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by a summation of the record keeping in term C.1.

4. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks and coatings.
5. Compliance with the usage limits cited in T&C B.1 and B.2 shall be demonstrated by the record keeping in T&C C.1.

#### **F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-05508 issued on December 11, 2003.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R013 - Manual Teflon Coating Booth Cell 3	OAC rule 3745-31-05(A)(3)	0.45 lbs OC/hr, coatings only; 10.8 lbs OC/day, coatings only; 6.8 lbs OC/day from cleanup materials; 1.98 TPY OC, coatings only; 1.24 TPY OC from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c and B.1- B.3.
		Exempt

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations, usage limitations and compliance with the Air Toxics Policy.
- 2.b The organic compound (OC) content, as applied of each coating employed in this emissions unit shall not exceed 6.47 pounds of OC per gallon of coating.
- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 6.8 pounds of OC per gallon of cleanup material.
- 2.d The hourly emission limitation(s) outlined is based upon the emissions unit’s Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**B. Operational Restrictions**

1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 639 gallons for coatings and 365 gallons for cleanup materials.
2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons for coatings and 1 gallon for cleanup materials.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and
  - e. A record of each cleanup material employed in this emissions unit, indicating whether or not the cleanup material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

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

2. The permit to install for this emissions unit R013 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

**3M Precision Optics**  
**PTI Application: 14-05702**  
**Issued**

**Facility ID: 1413000327**

**Emissions Unit ID: R013**

Pollutant: Isopropanol  
 TLV (ug/m3): 491,500  
 Maximum Hourly Emission Rate (lbs/hr): 0.47  
 Predicted 1-Hour Maximum Ground-Level  
 Concentration (ug/m3): 545  
 MAGLC (ug/m3): 11,700

Physical changes to or 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 Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total volume, in gallons, of all coatings employed in emissions unit R013 and the total volume, in gallons, of all cleanup materials employed in emissions unit R013 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded 10.8 pounds per day, and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded 6.8 pounds per day, and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in T&Cs A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in T&Cs B.2.

If no exceedances occurred during the reporting period then a report is required stating so.

3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Emissions Limitations  
 0.45 lbs OC/hour, coatings only

Applicable Compliance Method

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the emission factor found in this permit to install application by the maximum hourly coating of parts.

2. Emissions Limitations

10.8 lbs OC/day, coatings only  
6.8 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping in term C.1.

3. Emissions Limitations

1.98 TPY OC, coatings only  
1.24 TPY OC from cleanup materials

#### Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by a summation of the record keeping in term C.1.

4. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks and coatings.
5. Compliance with the usage limits cited in T&C B.1 and B.2 shall be demonstrated by the record keeping in T&C C.1.

#### **F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-05508 issued on December 11, 2003.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R014 - Manual Teflon Coating Booth Cell 4	OAC rule 3745-31-05(A)(3)	0.45 lbs OC/hr, coatings only; 10.8 lbs OC/day, coatings only; 6.8 lbs OC/day from cleanup materials; 1.98 TPY OC, coatings only; 1.24 TPY OC from cleanup materials.
	OAC rule 3745-21-07(G)(2)	See terms A.2.b, A.2.c and B.1- B.3.
		Exempt

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, coating and cleanup material OC content limitations, usage limitations and compliance with the Air Toxics Policy.
- 2.b The organic compound (OC) content, as applied of each coating employed in this emissions unit shall not exceed 6.47 pounds of OC per gallon of coating.
- 2.c The OC content of each cleanup material employed in this emissions unit shall not exceed 6.8 pounds of OC per gallon of cleanup material.
- 2.d The hourly emission limitation(s) outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this

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limit.

**B. Operational Restrictions**

1. The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 639 gallons for coatings and 365 gallons for cleanup materials.
2. The maximum daily coating and cleanup material usage for this emissions unit shall not exceed 1.75 gallons for coatings and 1 gallon for cleanup materials.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. The company identification for each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The OC content of each coating and cleanup material, in pounds per gallon, as applied;
  - d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed]; and
  - e. A record of each cleanup material employed in this emissions unit, indicating whether or not the cleanup material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

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

2. The permit to install for this emissions unit R014 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropanol  
TLV (ug/m3): 491,500  
Maximum Hourly Emission Rate (lbs/hr): 0.47  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 545  
MAGLC (ug/m3): 11,700

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

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- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. Documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. When the 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 annual reports to the Hamilton County Department of Environmental Services which specify the total volume, in gallons, of all coatings employed in emissions unit R014 and the total volume, in gallons, of all cleanup materials employed in emissions unit R014 for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the organic compound emissions from the coatings exceeded 10.8 pounds per day, and the actual organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the cleanup materials exceeded 6.8 pounds per day, and the actual organic compound emissions for each such day.
  - c. An identification of each day during which any coatings and/or cleanup materials exceeded the applicable maximum OC content limits outlined in T&Cs A.2.b. and A.2.c.
  - d. An identification of each day during which any coating and/or cleanup material usage exceeded the applicable limits outlined in T&Cs B.2.

If no exceedances occurred during the reporting period then a report is required stating so.

3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Emissions Limitations

0.45 lbs OC/hour, coatings only

Applicable Compliance Method

Compliance with the hourly OC emission limitation shall be demonstrated by multiplying the emission factor found in this permit to install application by the maximum hourly coating of parts.

2. Emissions Limitations

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10.8 lbs OC/day, coatings only

6.8 lbs OC/day from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitations shall be demonstrated by the record keeping in term C.1.

3. Emissions Limitations

- 1.98 TPY OC, coatings only
- 1.24 TPY OC from cleanup materials

Applicable Compliance Method

Compliance with the annual OC emissions limitations shall be demonstrated by a summation of the record keeping in term C.1.

- 4. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks and coatings.
- 5. Compliance with the usage limits cited in T&C B.1 and B.2 shall be demonstrated by the record keeping in T&C C.1.

**F. Miscellaneous Requirements**

- 1. The terms and conditions in this permit to install shall supercede the terms and conditions for this emission unit in permit to install 14-05508 issued on December 11, 2003.

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