

Synthetic Minor Determination and/or Netting Determination

Permit To Install **03-16359**

A. Source Description

PPG Industries, Inc. has proposed the installation of 12 window assembly stations subject to OAC rule 3745-21-07 (G) (2). Group emission limitations for volatile organic compounds (VOC), individual Hazardous Air Pollutants (HAPs), and aggregate HAPs were previously established for 13 other coating operations, (K004, and P017-P028), located at the facility in PTI #03-13402 issued on February 27, 2001. The group limit will now include emissions units K004, P017-P028, and the 12 window assembly stations (P029-P040).

B. Facility Emissions and Attainment Status

The facility is potentially a major source for Title V for VOC and HAPs emissions. Richland County is in attainment/unclassifiable for all criteria pollutants.

C. Source Emissions

POTENTIAL EMISSIONS: Without any restrictions, the facility has a potential to emit greater than 100 tons/yr (TPY) VOC and greater than 10 TPY of any individual HAP and 25 TPY of any combination of HAPs.

RESTRICTING POTENTIAL EMISSIONS: The facility has requested a combined annual gallon coating usage restriction of 25,067 along with maximum VOC content restrictions of 7.0 pounds per gallon and 11.0 pounds per gallon to reduce their VOC emissions below Title V levels. The facility has also requested annual emissions limitations of 9.90 TPY of any individual HAP and 24.90 TPY of any combination of HAPs to reduce their emissions to below Title V thresholds.

D. Conclusion

With the coating gallon usage restrictions and OC content restrictions, the OC emissions will be below the Title V thresholds. With the annual HAP emissions limitations, the facility will be below the single and aggregate HAP Title V thresholds. Therefore, the facility will not be subject to Title V.



State of Ohio Environmental Protection Agency



**RE: DRAFT PERMIT TO INSTALL
RICHLAND COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 03-16359

Fac ID: 0370000217

DATE: 6/7/2005

PPG Industries Inc - Crestline
Richard Krehnovi
5066 State Route 30
Crestline, OH 44827

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

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$2400** will be due. Please do not submit any payment now.

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

Sincerely,

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

CC: USEPA

NWDO

Richland Co Reg Planning Commission

RICHLAND COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 03-16359 FOR AN AIR CONTAMINANT SOURCE FOR
PPG Industries Inc - Crestline**

On 6/7/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **PPG Industries Inc - Crestline**, located at **5066 State Route 30, Crestline, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 03-16359:

Installaton of 12 window assembly stations.

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

Don Waltermeyer, Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402 [(419)352-8461]



**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 03-16359

Application Number: 03-16359
Facility ID: 0370000217
Permit Fee: **To be entered upon final issuance**
Name of Facility: PPG Industries Inc - Crestline
Person to Contact: Richard Krehnovi
Address: 5066 State Route 30
Crestline, OH 44827

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5066 State Route 30
Crestline, Ohio**

Description of proposed emissions unit(s):
Installation of 12 window assembly stations.

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

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

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information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

PPG Industries Inc - Crestline

Facility ID: 0370000217

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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	87.60
Individual HAP	9.90
Aggregate HAPs	24.90
VOC*	93.86

* Group VOC limit includes multiple emission units permitted under PTI #03-13402, and as such, is greater than the OC limitation established in this permit.

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>
Window Assembly Line #1	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a 93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b) 9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are less stringent than or equivalent to

Emissions Unit ID: **P029**

the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.

- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for the operation:

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- a. the company identification of each coating, adhesive, and cleanup material employed;
- b. the number of gallons of each coating, adhesive, and cleanup material employed;
- c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
- d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
- e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
- f. the total number of hours the emissions unit was in operation;
- g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

- h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b" x "c");

- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage rates

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5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8

MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

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2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

PPG Industries Inc - Crestline
PTI Application: 03 16350
Issued

Facility ID: 0370000217

Emissions Unit ID: P029

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
Window Assembly Line #2	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

**PPG I
PTI A**Emissions Unit ID: **P030****Issued: To be entered upon final issuance**

- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P030

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m3): 188.4

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Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2,224.8

MAGLC (ug/m3): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states

that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:

Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.

- b. **Emission Limitation:**

7.3 tons OC/yr

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.

- c. **Emission Limitation:**

93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

- d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

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PTI A

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1. None.

Emissions Unit ID: **P030**

PPG I

PTI A

Emissions Unit ID: P031

Issued: To be entered upon final issuance**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>
Window Assembly Line #3	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

Emissions Unit ID: P031

- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

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1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

$$\text{OC emissions from cleanup operations} = (\text{total gallons of cleanup material used} \times \text{solvent density of cleanup material}) - (\text{total gallons cleanup material sent off-site for disposal or reclamation} [\text{minus solids content of said material}] \times \text{solvent density}).$$
 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.

2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
 4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
 - a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

PPG I**PTI A**Emissions Unit ID: **P031****Issued: To be entered upon final issuance**

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m3): 188.4

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Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2,224.8

MAGLC (ug/m3): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states

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that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:

Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.

- b. **Emission Limitation:**

7.3 tons OC/yr

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.

- c. **Emission Limitation:**

93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

- d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

PPG Industries Inc - Crestline
PTI Application: 02 16350
Issued

Facility ID: 0370000217

Emissions Unit ID: P031

1. None.

PPG I

PTI A

Emissions Unit ID: P032

Issued: To be entered upon final issuance**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>
Window Assembly Line #4	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P032

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

Issued: To be entered upon final issuance

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

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Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG Industries Inc - Crestline
PTI Application: 03 16350
Issued

Facility ID: 0370000217

Emissions Unit ID: **P032**

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
Window Assembly Line #5	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P033

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8

MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

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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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG I

PTI A

Emissions Unit ID: **P033**

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Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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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>
Window Assembly Line #6	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

Emissions Unit ID: P034

- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

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1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

 The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

$$\text{OC emissions from cleanup operations} = (\text{total gallons of cleanup material used} \times \text{solvent density of cleanup material}) - (\text{total gallons cleanup material sent off-site for disposal or reclamation} [\text{minus solids content of said material}] \times \text{solvent density}).$$
 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

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rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

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Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG Industries Inc - Crestline

PTI Application: 03 16350

Issued

Facility ID: 0370000217

Emissions Unit ID: P034

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

PPG I

PTI A

Emissions Unit ID: P035

Issued: To be entered upon final issuance**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>
Window Assembly Line #7	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P035

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8

MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

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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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
 OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
 Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
 7.3 tons OC/yr

Applicable Compliance Method:
 Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
 93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG I

PTI A

Emissions Unit ID: **P035**

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Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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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>
Window Assembly Line #8	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

Emissions Unit ID: P036

- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

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1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

 The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

$$\text{OC emissions from cleanup operations} = (\text{total gallons of cleanup material used} \times \text{solvent density of cleanup material}) - (\text{total gallons cleanup material sent off-site for disposal or reclamation} [\text{minus solids content of said material}] \times \text{solvent density}).$$
 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
 4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
 - a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

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rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

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Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG I

PTI A

Emissions Unit ID: **P036**

Issued: To be entered upon final issuance

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Window Assembly Line #9	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P037

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

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rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

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Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

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PTI Application: 03 16350
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Facility ID: 0370000217

Emissions Unit ID: P037

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

PPG I

PTI A

Emissions Unit ID: P038

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. Applicable Emissions Limitations and/or Control Requirements**

- 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>
Window Assembly Line #10	OAC rule 3745-31-05	<p>Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)</p> <p>7.3 tons OC/yr</p> <p>See A.2.a</p> <p>93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)</p> <p>9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)</p>

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P038

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8

MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

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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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG I

PTI A

Emissions Unit ID: **P038**

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Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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>
Window Assembly Line #11	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

Emissions Unit ID: **P039**

- 2.a The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

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1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

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rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

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Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG Industries Inc - Crestline

PTI Application: 03 16350

Issued

Facility ID: 0370000217

Emissions Unit ID: P039

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.

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PTI A

Emissions Unit ID: P040

Issued: To be entered upon final issuance**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>
Window Assembly Line #12	OAC rule 3745-31-05 (A) (3)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials)
	OAC rule 3745-21-07 (G) (2)	7.3 tons OC/yr
	OAC rule 3745-31-05 (C)	See A.2.a
		93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see A.2.b)
		9.90 tons per rolling 12-month period of any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, and P017-P040 combined (see A.2.c)

*Hazardous Air Pollutant (HAP) as defined in Section 112 (b) of the Clean Air Act.

2. Additional Terms and Conditions

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- 2.a** The requirements established pursuant to this rule are less stringent than or equivalent to the requirements of OAC rule 3745-31-05 (A) (3) because the permittee does not always employ photochemically reactive materials in this emissions unit.
- 2.b** The emissions of VOC from emissions units K004 and P017-P040 combined shall not exceed 93.86 tons per year based on a rolling, 12-month summation of monthly emissions. The federally enforceable VOC limitation is based on coating usage restrictions and VOC content requirements (See B.1. and B.2.). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See B.1).
- 2.c** HAP emissions from emissions units K004 and P017-P040 shall not exceed 9.90 tons per year for any individual HAP and 24.90 tons per year for any combination of HAPs, based upon a rolling 12-month summation of the monthly HAP emissions

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402, issued on February 27, 2001, and, as such, rolling HAP emission records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

B. Operational Restrictions

- 1. The maximum annual coating usage for emissions units K004 and P017-P040 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coating usage records exist. The applicant shall use the existing records to determine compliance upon startup under this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: P040

1. The permittee shall collect and record the following information for each day for the operation:
 - a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the number of gallons of each coating, adhesive, and cleanup material employed;
 - c. the organic compound content of each coating, adhesive, and cleanup material employed, in pounds per gallon, as applied;
 - d. the organic compound emission rate for each coating, adhesive, and cleanup material employed, in pounds per day ("b" x "c");
 - e. the total organic compound emission rate for all coatings, adhesives, and cleanup materials, in pounds per day (sum of "d");
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly organic compound emissions rate for all coatings, adhesives, and cleanup materials employed, i.e., ("e"/"f"), in pounds per hour (average); and

The company may calculate OC emissions from cleanup operations in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

OC emissions from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off-site for disposal or reclamation [minus solids content of said material] x solvent density).

 - h. the annual, year to date OC emissions, in tons, from all coatings, adhesives, and cleanup materials employed (sum of "e") for each calendar day to date from January to December.
2. In order to demonstrate compliance with the 93.86 tons VOC per rolling 12-month period, the permittee shall collect and record the following information each month for emissions units K004, and P017-P040 combined:
 - a. the name and identification number of each coating, adhesive and cleanup material;
 - b. the VOC content of each coating, adhesive, and cleanup material, in lbs/gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and cleanup material employed ("b"

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- x "c");
- e. the total VOC emission rate from all coatings, adhesives, and cleanup materials employed (summation of "d"); and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P040 combined:
- a. the company identification of each coating, adhesive, and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and cleanup materials employed, [summation of each HAP emission rate ("b" x "c") for each individual coating/adhesive/and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (sum of "d" for all HAPs), in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
4. In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004 and P017-P040:
- a. the annual* number of gallons of each coating, adhesive, and cleanup material;
 - b. the annual* number of gallons of coatings, adhesives and cleanup materials with a maximum VOC content of 7.0 lbs/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and cleanup materials.

*Based upon a rolling, 12- month summation of the coatings, adhesive and cleanup material usage

rates

5. The permit to install was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene*

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 96.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 2,224.8

MAGLC (ug/m³): 4,486

*All emissions assumed to be toluene since toluene is the worst case pollutant

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the

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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 still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. any exceedance of the maximum allowable usage rates and VOC content restrictions specified in paragraph B.1. of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph A.2.c of this permit for emissions units K004, and P017-P040 combined; and
 - c. any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004, and P017-P040 combined.

The permittee shall submit these deviation (excursion) reports in accordance with the General

Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
3. The permittee shall submit annual written reports of any deviations (excursions) from the annual organic compound emissions limitation in section A.1. of this permit. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. **Emission Limitation:**
OC emissions shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:
Compliance with these limitations shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - b. **Emission Limitation:**
7.3 tons OC/yr

Applicable Compliance Method:
Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.1. of this permit.
 - c. **Emission Limitation:**
93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined

PPG I

PTI A

Emissions Unit ID: **P040**

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Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.2. of this permit.

d. **Emission Limitation:**

9.90 tons per rolling 12-month period for any individual HAP and 24.90 tons per rolling 12-month period for any combination of HAPs for emissions units K004, and P017-P040 combined

Applicable Compliance Method:

Compliance with this limitation shall be demonstrated through the recordkeeping requirements in section C.3. of this permit.

F. Miscellaneous Requirements

1. None.