



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

2/5/2013

Donald Tesin
Pittsburgh Glass Works, LLC
PO Box 290, 5064 Lincoln Hgwy
Crestline, OH 44827

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0370000217
Permit Number: P0112839
Permit Type: Administrative Modification
County: Richland

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Pittsburgh Glass Works, LLC**

Facility ID:	0370000217
Permit Number:	P0112839
Permit Type:	Administrative Modification
Issued:	2/5/2013
Effective:	2/5/2013
Expiration:	1/6/2014



Division of Air Pollution Control
Permit-to-Install and Operate
for
Pittsburgh Glass Works, LLC

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Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0112839
Facility ID: 0370000217
Effective Date: 2/5/2013

Authorization

Facility ID: 0370000217
Application Number(s): M0002081
Permit Number: P0112839
Permit Description: Administrative modification to establish the same expiration date for the permits issued to this facility.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 2/5/2013
Effective Date: 2/5/2013
Expiration Date: 1/6/2014
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Pittsburgh Glass Works, LLC
5066 Lincoln Highway
Crestline, OH 44827

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0112839
 Permit Description: Administrative modification to establish the same expiration date for the permits issued to this facility.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID: K004
 Company Equipment ID: Mold Shop Layout
 Superseded Permit Number: P0087486
 General Permit Category and Type: Not Applicable

Emissions Unit ID: P038
 Company Equipment ID: Window Assy Line #10
 Superseded Permit Number: P0087490
 General Permit Category and Type: Not Applicable

Emissions Unit ID: P039
 Company Equipment ID: Window Assy Line #11
 Superseded Permit Number: P0103821
 General Permit Category and Type: Not Applicable

Group Name: P048 and P049

Emissions Unit ID:	P048
Company Equipment ID:	5 DBO A Silk Screen Machine
Superseded Permit Number:	P0109543
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P049
Company Equipment ID:	5-DBO B Silk Screen Machine
Superseded Permit Number:	P0109543
General Permit Category and Type:	Not Applicable

Group Name: Silk Screening Print #1

Emissions Unit ID:	P019
Company Equipment ID:	1 DBO-A
Superseded Permit Number:	P0087486
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P020
Company Equipment ID:	1 DBO-B
Superseded Permit Number:	P0087486
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P021
Company Equipment ID:	5 DBO-A
Superseded Permit Number:	P0087486
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P022
Company Equipment ID:	5 DBO-B
Superseded Permit Number:	P0087486
General Permit Category and Type:	Not Applicable



Group Name: Silk Screening Print #2

Emissions Unit ID:	P023
Company Equipment ID:	2 VAW
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P024
Company Equipment ID:	21 HPB
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P025
Company Equipment ID:	20 HPB
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P026
Company Equipment ID:	6 VAW
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P027
Company Equipment ID:	19 HPB-B
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P028
Company Equipment ID:	19 HPB-A
Superseded Permit Number:	P0087486
General Permit Category andType:	Not Applicable

Group Name: Window Assembly Line #1

Emissions Unit ID:	P029
Company Equipment ID:	Window Assy Line #1
Superseded Permit Number:	P0087487
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P030
Company Equipment ID:	Window Assy Line #2
Superseded Permit Number:	P0087487
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P031
Company Equipment ID:	Window Assy Line #3
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P032
Company Equipment ID:	Window Assy Line #4
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P033
Company Equipment ID:	Window Assy Line #5
Superseded Permit Number:	P0087487
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P034
Company Equipment ID:	Window Assy Line #6
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P035
Company Equipment ID:	Window Assy Line #7
Superseded Permit Number:	P0087488



General Permit Category andType:	Not Applicable
Emissions Unit ID:	P036
Company Equipment ID:	Window Assembly Line #8
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P037
Company Equipment ID:	Window Assy Line #9
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P040
Company Equipment ID:	Window Assy Line #12
Superseded Permit Number:	P0087488
General Permit Category andType:	Not Applicable

Group Name: Window Assembly Lines #2

Emissions Unit ID:	P041
Company Equipment ID:	P041
Superseded Permit Number:	03-17442
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P042
Company Equipment ID:	Window assembly line number 14.
Superseded Permit Number:	03-17442
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P043
Company Equipment ID:	Window assembly line number 15.
Superseded Permit Number:	03-17442
General Permit Category andType:	Not Applicable

Group Name: Window Assembly Lines #3

Emissions Unit ID:	P044
Company Equipment ID:	P044
Superseded Permit Number:	P0106898
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P045
Company Equipment ID:	P045
Superseded Permit Number:	P0106898
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P046
Company Equipment ID:	P046
Superseded Permit Number:	P0106898
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P047
Company Equipment ID:	P047
Superseded Permit Number:	P0106898
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0112839
Facility ID: 0370000217
Effective Date: 2/5/2013

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0112839
Facility ID: 0370000217
Effective Date: 2/5/2013

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Pittsburgh Glass Works, LLC

Permit Number: P0112839

Facility ID: 0370000217

Effective Date: 2/5/2013

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0112839
Facility ID: 0370000217
Effective Date: 2/5/2013

C. Emissions Unit Terms and Conditions



1. K004, Mold Shop Layout

Operations, Property and/or Equipment Description:

Miscellaneous metal parts coating operation (Mold shop lay out) (formerly permitted as R002)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. g)(1)

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)b., c)(1), c)(2), c)(3), d)(2), d)(3), d)(4), e)(3), f)(1)b. and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Use of no more than 10 gallons of coatings and cleanup materials per day 30 lbs organic compounds (OC)/day and 5.5 tons OC/yr from coatings and cleanup materials
b.	OAC rule 3745-21-09(U)(2)(e)(iii)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P019-P028: 93.86 tons volatile organic compounds (VOC) per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)b.] Group Limit for K004 and P019-P028: 9.9 tons per rolling 12-month period of any individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)b.]



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		*Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act

(2) Additional Terms and Conditions

- a. The emissions limitations established pursuant to this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017-P028, of 93.86 tons of VOC, 9.9 tons of any individual HAP, and 24.9 tons of combined HAPs per rolling, 12-month period, all based on content and gallon usage restrictions for the purpose of avoiding Title V applicability [See c)(1), c)(2) and c)(3)].

c) Operational Restrictions

- (1) The permittee shall not employ any coating, as applied, in excess of 7.0 lbs VOC/gallon (process coatings) and 11.0 lbs VOC/gallon (machinist ink and/or special order process coatings).
- (2) The maximum annual coating usage for emissions units K004, P019-P028 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating with a maximum VOC content of 11.0 lbs/gallon of coating;
 - b. 25,067 gallons of coating with a maximum VOC content of 7.0 lbs/gallon of coating;
 - c. 25,067 gallons for all coatings combined.

The annual coating usage limitations shall be based upon a rolling, 12-month summation of the monthly coating usage rates.

Compliance with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the monthly coating usage rates.

- (3) Combined annual HAP emissions from emissions units K004, P019-P028 shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination HAPs, based upon a rolling, 12-month summation of the monthly HAP emissions.

Compliance with the annual HAP emission limitations of 9.9 tons and 24.9 tons shall be based upon a rolling, 12-month summation of the monthly emission rates.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for emissions unit K004:
 - a. The company identification for each coating and cleanup material employed;
 - b. the volume, in gallons/day, of each coating and cleanup material employed;
 - c. the total volume, in gallons/day, of all of the coatings and cleanup materials employed;
 - d. the OC content of each coating and cleanup material, in lbs OC/gallon;
 - e. the OC emission rate for each coating and cleanup material $[d)(1)b. \times d)(1)d.]$, in lbs OC/day;
 - f. the total OC emission rate for all coatings and cleanup materials $[\text{sum of } d)(1)e.]$, in lbs/day; and
 - g. the annual, year to date OC emission rate from all coatings and cleanup materials $[\text{sum of } d)(1)f. \text{ for each calendar day to date from January to December } \times 1 \text{ ton}/2000 \text{ lbs}]$, in tons OC/year.
- (2) The permittee shall collect and record the following information each month for emissions units K004, P019-P028, as a group:
 - a. The company identification for each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, in lbs OC/gallon;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the VOC emission rate for each coating and cleanup material $[d)(2)b. \times d)(2)c. \times 1 \text{ ton}/2000 \text{ lbs.}]$, in tons/month;
 - e. the total VOC emission rate for all coatings and cleanup materials $[\text{summation of } (d)(2)d.]$, in tons per month; and
 - f. the annual emissions of VOC, based on a rolling, 12-month period.
- (3) In addition to the above information, the permittee shall also record the following information for each month for emissions units K004, P019-P028, as a group:
 - a. The annual* number of gallons of each coating and cleanup material;
 - b. The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - c. The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and



d. The annual* number of gallons of all coatings and cleanup materials.

*Based upon a rolling, 12-month summation of the coating usage rates.

(4) The permittee shall collect and record the following information regarding HAPs emissions each month for emissions units K004, P019-P028, as a group:

- a. the company identification of each coating and cleanup material employed;
- b. the lbs per gallon of each HAP in each coating and cleanup material, as applied;
- c. the number of gallons of each coating and cleanup material employed;
- d. the emission rate for each HAP from each coating and cleanup material employed [d)(4)b. x d)(4)c.], in lbs/month;
- e. the total emission rate for each HAP from all coatings and cleanup materials employed [summation of d)(4)d.], in lbs/month;
- f. the total HAP emission rate for the combination of all HAPs from all coatings and cleanup materials employed [summation of d)(4)e.], in lbs/month; and
- g. the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that coating line K004 employs more than 10 gallons of coatings and cleanup materials per day and/or more than 30 lbs of OC/day. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
- (3) The permittee shall submit deviation (excursion) reports for emissions units K004, P019 - P028, as a group, which identify exceedances of any of the following:
 - a. Any exceedances of the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2).; and
 - b. Any exceedances of the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).



f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

30 lbs OC/day and 5.5 tons OC/yr from coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(1).

b. Emission Limitation:

Group limit of 93.86 tons VOC per rolling 12-month period based on coating usage and VOC content restrictions

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(2).

c. Emission Limitation:

Group limit of 9.9 tons per rolling 12-month period of any individual HAP and 24.9 tons per rolling 12-month period of any combination of HAPs

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(4).

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



2. P038, Window Assy Line #10

Operations, Property and/or Equipment Description:

Window assembly line 10.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. d)(5)
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)c., b)(2)c., c)(1), c)(2), c)(3), c)(4), e)(2), f)(1)c. and f)(1)d.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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) 7.30 tons OC/yr
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P019-P040: 93.86 tons VOC per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)c.] Group Limit for K004 and P019-P040: 9.9 tons per rolling 12-month period of any individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)d.] *Hazardous Air Pollutant (HAP) as



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		defined in Section 112(b) of the Clean Air Act

(2) Additional Terms and Conditions

- 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.
- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

None.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

None.

- c. The emissions of VOC from emissions units K004 and P019-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 c)(1) and c)(2)]. Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability [See c)(1)].
- d. 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 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) Operational Restrictions

- (1) The maximum annual coating usage for emissions units K004, P019-P028 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating with a maximum VOC content of 11.0 lbs/gallon of coating;
 - b. 25,067 gallons of coating with a maximum VOC content of 7.0 lbs/gallon of coating;
 - c. 25,067 gallons for all coatings combined.
- (2) Coating usage restrictions were initially established in Permit to Install (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.

d) Monitoring and/or Recordkeeping Requirements

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

The company may calculate OC emission 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); and

- h. The annual, year-to-date OC emissions, in tons, from all coatings, adhesives and cleanup materials employed [the summation of d)(1)e.] for each calendar day to date from January to December.
- (2) The permittee shall collect and record the following information each month for emissions units K004, P019-P040, as a group:
- a. The company identification for each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, in lbs OC/gallon;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the VOC emission rate for each coating and cleanup material [d)(2)b. x d)(2)c. x 1 ton/2000 lbs.] in tons/month;
 - e. the total VOC emission rate for all coatings and cleanup materials [summation of (d)(2)d. in tons per month]; and
 - f. the annual emissions of VOC, based on a rolling, 12-month period.
- (3) In addition to the above information, the permittee shall also record the following information for each month for emissions units K004, P019-P040, as a group:
- a. The annual* number of gallons of each coating and cleanup material;
 - b. The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - c. The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - d. The annual* number of gallons of all coatings and cleanup materials.
- *Based upon a rolling, 12-month summation of the coating usage rates.
- (4) The permittee shall collect and record the following information regarding HAPs emissions each month for emissions units K004, P019-P040, as a group:
- a. the company identification of each coating and cleanup material employed;
 - b. the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - c. the number of gallons of each coating and cleanup material employed;



- d. the emission rate for each HAP from each coating and cleanup material employed [d)(4)b. x d)(4)c. in lbs/month];
 - e. the total emission rate for each HAP from all coatings and cleanup materials employed [summation of d)(4)d.] in lbs/month;
 - f. the total HAP emission rate for the combination of all HAPs from all coatings and cleanup materials employed [summation of d)(4)e.] in lbs/month; and
 - g. the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.
- (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 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.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. Any exceedance of the maximum allowable usage raets and VOC content restrictions specified in c)(1) of this permit;
 - b. Any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in b)(2)d. of this permit for emissions units K004, and P019-P040 combined; and



- c. Any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004 and P019-P040 combined.
- (3) The permittee shall submit deviation (excursion) reports for each emissions unit, which include the following information:
 - a. An identification of each day during which the average hourly OC emissions exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions exceeded 40 pounds per day, and the actual OC emissions for each such day.
- f) Testing Requirements
 - (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
8 lbs OC/hr, 40 lbs OC/day

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1).
 - b. Emission Limitation:
7.3 tons OC/yr

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1)h.
 - c. Emission Limitation:
Group limit of 93.86 tons VOC per rolling 12-month period based on coating usage and OC content restrictions

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(3).
 - d. Emission Limitation:
Group limit of 9.9 tons per rolling 12-month period of any individual HAP and 24.9 tons per rolling 12-month period of any combination of HAPs

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(4).



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0112839
Facility ID: 0370000217
Effective Date: 2/5/2013

g) Miscellaneous Requirements

- (1) None.



3. P039, Window Assy Line #11

Operations, Property and/or Equipment Description:

Window assembly line 11.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. Term 1.d)(5)
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. Term 1.b)(1)c., 1.b)(2)b., 1.b)(2)c., 1.c)(1), 1.d)(2) – 1.d)(4), 1.e)(1), 1.f)(1)c., 1.f)(1)d.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A) (3)	See b)(2)a.
b.	OAC rule 3745-21-07 (G) (2)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day (includes coatings, adhesives and cleanup materials) [see b)(2)e.]
c.	OAC rule 3745-31-05 (D)	7.3 tons OC/yr See b(2)a. 93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P040 combined (see b(2)c.) 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



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		for emissions units K004, and P017-P040 combined (see b(2)d.)

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to organic compounds/volatile organic compounds (OC/VOC) emissions from this air contaminant source since the calculated annual emission rate for organic compounds (OC)* is less than ten tons per year taking into account the federally enforceable rule limit of 40 pounds of OC per day under OAC rule 3745-21-07(G)(2).

*For purposes of federal enforceability a limit on OC effectively restricts VOC.

- b. 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.
- c. 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 c)(1)). Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability (See c)(1)).
- d. 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.

- e. On February 18, 2008 Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The new OAC rule 3745-21-07 does not establish any requirements for this emissions unit. However, the rule rescindment and new rule have not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07, the requirement to comply with OAC rule 3745-21-07 (G) (2) still exists as part of the federally-approved SIP of Ohio.



c) 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.

d) Monitoring and/or Recordkeeping Requirements

- (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



- (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 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.

e) 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 c)(1) of this permit;
 - b. any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in paragraph B)(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 Standard Terms and Conditions of this permit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by February 15th of each year for the previous calendar year. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emissions limitations in section b)(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 d)(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 d)(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 d)(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 d)(3) of this permit.



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g) Miscellaneous Requirements

(1) None.



4. Emissions Unit Group -P048 and P049: P048,P049,

EU ID	Operations, Property and/or Equipment Description
P048	Silk Screen Printing (5-DBO A). Replacement for P021.
P049	Silk Screen Printing (5-DBO B). Replacement for P022.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b. and b)(1)d.; and g)(1).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c.; b)(2)c. through b)(2)e; c)(1); d)(1) through d)(4); e)(1); and f)(1)a. through f)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	7.30 tons volatile organic compounds (VOC)/year from each coating operation See b)(2)a.
b.	OAC rule 3745-31-05(A), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D)	<p>Volatile organic compounds (VOC) emissions shall not exceed 40 pounds/day from each coating operation. [See b)(2)c.]</p> <p>93.86 tons VOC per rolling, 12-month period for emissions units K004, P017, P019, P020 and P023-P049, combined [See b)(2)d.]</p> <p>9.90 tons per rolling, 12-month period for</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling, 12-month period for any combination of HAPs for emissions units K004, P017, P019, P020 and P023-P049, combined [See b)(2)e.]
d.	ORC 3704.03(F) and OAC rule 3745-114-01	See g)(1)

(2) Additional Terms and Conditions

a. The following requirements contained in this permit satisfy Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:

i. 7.30 tons VOC/year for each coating operations

[Emissions from cleanup operations for an individual window assembly line are negligible and; therefore, have not been addressed by an individual emission limitation for each window assembly line. Emissions from cleanup operations are included in the combined VOC limitation established under OAC rule 3745-31-05(D)]; and

ii. compliance with the requirements established under OAC rule 3745-31-05(D).

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the VOC emissions from emissions units P048 and P049 since the calculated annual emission rate for VOC is less than ten tons per year for each emissions unit taking into account



the federally enforceable limitation of 40 pounds VOC/day established under OAC rule 3745-31-05(D) and the uncontrolled potential to emit for associated cleanup operations.

- c. The emissions of VOC from an individual window assembly line shall not exceed 40 pounds per day. The VOC limitation is a federally enforceable limitation included in this permit for purposes of establishing the potential to emit for an individual window assembly line.
- d. The emissions of VOC from emissions units K004, P017, P019, P020 and P023-P049, 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 c)(1) and c)(2)]. Federally enforceable VOC limitations are being established for purposes of avoiding Title V applicability.

Rolling emissions limitations were initially established in Permit to Install (PTI) #03-13402 issued on February 27, 2001 and, as such, rolling, VOC 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.

- e. HAP* emissions from emissions units K004, P017, P019, P020 and P023-P049, combined, 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 rolling, 12-month summations of the monthly HAP emissions

Rolling emissions limitations were initially 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.

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

c) Operational Restrictions

- (1) The maximum annual coatings usage for emissions units K004, P017, P019, P020 and P023-P049, combined, shall not exceed any of the following:
 - a. 3,050 gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 pounds/gallon per rolling, 12-month period;
 - b. 25,067 gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 7.0 pounds/gallon per rolling, 12-month period; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling, 12-month period.



Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coatings 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.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for each emissions unit (P048 and P049) separately:
 - a. the company identification for each coating and/or adhesive employed;
 - b. the number of gallons of each coating and/or adhesive employed;
 - c. the volatile organic compound content of each coating and/or adhesive, in pounds per gallon;
 - d. the volatile organic compound emission rate from each coating and/or adhesive, in pounds per day [d)(1)b times d)(1)c.];
 - e. the total volatile organic compound emission rate for all coatings and/or adhesives, in pounds per day [summation of d)(1)d.]; and
 - f. the annual year-to-date volatile organic compound emission rate for all coatings and/or adhesives, in tons per year [summation of d)(1)e. for each calendar day-to-date from January to December].

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

- (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, P017, P019, P020 and P023-P049, combined:
 - a. the name and identification number of each coating, adhesive, and/or cleanup material;
 - b. the VOC content of each coating, adhesive, and/or cleanup material, in pounds per gallon, as applied;
 - c. the number of gallons of each coating, adhesive, and/or cleanup material employed;
 - d. the VOC emission rates from each coating, adhesive, and/or cleanup material employed [d)(2)b. x d)(2)c.], in pounds;
 - e. the total VOC emission rate from all the coatings, adhesives, and/or cleanup materials employed [summation of d)(2)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, P017, P019, P020 and P023-P049, combined:
- a. the company identification of each coating, adhesive, and/or cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating, adhesive, and/or cleanup material, as applied;
 - c. the number of gallons of each coating, adhesive, and/or cleanup material employed;
 - d. the total emission rate for each HAP from all coatings, adhesives, and/or cleanup materials employed, [summation of each HAP emission rate d)(3)b. x d)(3)c.] for each individual coating, adhesive, and cleanup material], in pounds per month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and/or cleanup materials employed, [summation of d)(3)d. for all HAPs], in pounds per month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, in tons, based upon rolling, 12-month summations.
- (4) In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004, P017, P019, P020 and P023-P049, combined:
- a. the annual* number of gallons of each coating, adhesive, and/or cleanup material;
 - b. the annual* number of gallons of coatings, adhesives, and/or cleanup materials with a maximum VOC content of 7.0 pounds/gallon;
 - c. the annual* number of gallons of coatings, adhesives, and/or cleanup materials with a maximum VOC content of 11.0 pounds/gallon of coating;
 - d. the annual* number of gallons of all coatings, adhesives, and/or cleanup materials.
- *Based upon a rolling, 12-month summation of the monthly coatings, adhesive and cleanup material usage rates.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:



- a. all deviations (excursions) of the following emission limitations, operational restrictions that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 93.86 tons VOC per rolling, 12-month period for emission units K004, P017, P019, P020 and P023-P049, combined.
 - ii. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 pounds per gallon per rolling, 12-month period for emissions units K004, P017, P019, P020 and P023-P049, combined.
 - iii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 pounds per gallon per rolling, 12-month period for emission units K004, P017, P019, P020 and P023-P049, combined.
 - iv. 25,067 gallons of coating, adhesive, and cleanup material per rolling, 12-month period for emission units K004, P017, P019, P020 and P023-P049, combined.
 - v. 9.90 tons per rolling 12-month period of any individual HAP for emissions units K004, P017, P019, P020 and P023-P049, combined.
 - vi. 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, P017, P019, P020 and P023-P049, combined.
 - vii. 40 pounds VOC per day from each coating operation associated with emissions units P048 and P049.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall



cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations

40 pounds VOC/day per P048 and P049

7.30 tons VOC/year per P048 and P049

Applicable Compliance Method

Compliance shall be demonstrated through the record keeping requirements specified in d)(1).

b. Emission Limitation

93.86 tons VOC per rolling, 12-month period for emissions units K004, P017, P019, P020 and P023-P049, combined

Applicable Compliance Method

Compliance shall be demonstrated through the record keeping requirements specified in d)(2).

c. Emission Limitations

9.90 tons per rolling, 12-month period of any individual HAP for emission units K004, P017, P019, P020 and P023-P049, combined

24.90 tons per rolling 12-month period of any combination of HAPs for emission units K004, P017, P019, P020 and P023-P049, combined

Applicable Compliance Method

Compliance shall be demonstrated through the record keeping requirements specified in d)(3).

d. Emission Limitations

The maximum annual coatings usage for emissions units K004, P017, P019, P020 and P023-P049, combined, shall not exceed any of the following:

i. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 pounds/gallon per rolling, 12-month period;



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Effective Date: 2/5/2013

- ii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 pounds/gallon per rolling, 12-month period; and
- iii. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling, 12-month period.

Applicable Compliance Method

Compliance shall be demonstrated through the record keeping requirements specified in d)(4).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the maximum annual emissions for each toxic air contaminant (from emission units P048 and P049 combined), as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



5. Emissions Unit Group -Silk Screening Print #1: P019,P020,P021,P022,

EU ID	Operations, Property and/or Equipment Description
P019	Silk screen printing (1 DBO-A) (formerly permitted as K002)
P020	Silk screen printing (1 DBO-B) (formerly permitted as K002)
P021	Silk screen printing (5 DBO-A) (formerly permitted as K003)
P022	Silk screen printing (5 DBO-B) (formerly permitted as K003)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. g)(1).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)b., c)(1), c)(2), c)(3), d)(3), d)(4), d)(5), e)(3), f)(1)d. and f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	7.36 lbs OC/hr on days when employing exclusively non-photochemically reactive coatings and cleanup materials. [See b)(2)b.i.] 14.30 tons OC/yr from all coatings and cleanup materials. [See b)(2)b.iv.]
b.	OAC rule 3745-21-07(G)(2)	8 lbs OC/hr; 40 lbs OC/day [See b)(2)a.ii., b)(2)a.iii. and b)(2)b.]
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P019-P028: 93.86 tons VOC per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)c.] Group Limit for K004 and P019-P028: 9.9 tons per rolling 12-month period of any



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)c.] *Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

None.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

b)(1)b., b)(2)b.ii., b)(2)b.iii., d)(1), e)(2)a., e)(2)b. and f)(1)c.

- b. Each emissions unit will be subject to the following emissions limitations based on the type of coating and cleanup materials employed on a given day:
 - i. On days when exclusively non-photochemically reactive coatings and non-photochemically reactive cleanup materials are employed, OC emissions from the coating and cleanup operations are subject to an emissions limitation of 7.36 lbs OC/hr.
 - ii. On days when any portion of the coatings employed are photochemically reactive and the cleanup material is non-photochemically reactive, OC emissions from the coating operation (both photochemically reactive and non-photochemically reactive) are subject to an emissions limitation of 8 lbs/hr and 40 lbs/day. Note: OC emissions from the non-photochemically reactive cleanup materials are not counted towards compliance with these emissions limitations, but are subject to an emissions limitation of 2383 lbs/month.



- iii. On days when all or a portion of the cleanup materials employed are photochemically reactive, all OC emissions from the coating operation (both photochemically reactive and non-photochemically reactive) and OC emissions from photochemically reactive cleanup materials employed are subject to an emission limitation of 8 lbs/hr and 40 lbs/day. Note: OC emissions from the non-photochemically reactive cleanup materials are not counted towards compliance with these emissions limitations, but are subject to an emissions limitation of 883 lbs/month.
 - iv. Annual OC emissions cannot exceed 7.3 tons if photochemically reactive coatings and/or photochemically reactive cleanup materials are employed each and every day.
 - c. The permittee has requested federally enforceable limitations for emissions units K004 and P019-P028, of 93.86 tons VOC, 9.9 tons of any individual HAP, and 24.9 tons of combined HAPs per rolling, 12-month period, all based on content and gallon usage restrictions for the purpose of avoiding Title V applicability [See c)(1), c)(2) and c)(3)].
- c) Operational Restrictions
- (1) The permittee shall not employ any coating, as applied, in excess of 7.0 lbs VOC/gallon (process coatings) and 11.0 lbs VOC/gallon (machinist ink and/or special order process coatings).
 - (2) The maximum annual coating usage for emissions units K004, P019-P028 combined shall not exceed any of the following:
 - a. 3,050 gallons of coating with a maximum VOC content of 11.0 lbs/gallon of coating;
 - b. 25,067 gallons of coating with a maximum VOC content of 7.0 lbs/gallon of coating;
 - c. 25,067 gallons for all coatings combined.
- The annual coating usage limitations shall be based upon a rolling, 12-month summation of the monthly coating usage rates.
- Compliance with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the monthly coating usage rates.
- (3) Combined annual HAP emissions from emissions units K004, P019-P028 shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination HAPs, based upon a rolling, 12-month summation of the monthly HAP emissions.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for each emissions unit:
 - a. The company identification for each coating and cleanup material employed with an identification of whether each material is a photochemically reactive material.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The organic compound (OC) content of each coating and cleanup material, in pounds per gallon.
 - d. The total OC emission rate for all coatings and cleanup materials [i.e. d)(1)b. x d)(1)c.], in pounds of OC per day calculated consistent with the limitations specified in paragraphs b)(2)a.i. through b)(2)a.iii.
 - e. The total number of hours the emissions unit was in operation.
 - f. The average hourly OC emission rate for all coatings and cleanup materials [i.e., d)(1)d./d)(1)e.], in pounds per hour (average) calculated consistent with the limitations specified in paragraphs b)(2)a.i. through b)(2)a.iii.
- (2) The permittee shall collect and record the following information for each month for each emissions unit:
 - a. The company identification for each coating and cleanup material employed.
 - b. Documentation on whether or not each coating and cleanup material is a photochemically reactive material.
 - c. The number of gallons of each coating and cleanup material employed.
 - d. The OC content of each coating and cleanup material, in lbs/gallon.
 - e. The OC emission rate for each coating and cleanup material [d)(2)c. x d)(2)d.], in lbs/month.
 - f. The total OC emission rate for all coating and cleanup materials [sum of d)(2)e.], in lbs/month.
 - g. The annual, year to date OC emission rate from all coating and cleanup material usage [sum of d)(2)f. for each calendar month to date from January to December].
- (3) The permittee shall collect and record the following information each month for emissions units K004, P019-P028, as a group:
 - a. The company identification for each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, in lbs OC/gallon;



- c. the number of gallons of each coating and cleanup material employed;
 - d. the VOC emission rate for each coating and cleanup material [d)(3)b. x d)(3)c. x 1 ton/2000 lbs.], in tons/month;
 - e. the total VOC emission rate for all coatings and cleanup materials [summation of d)(3)d.], in tons per month; and
 - f. the annual emissions of VOC, based on a rolling, 12-month period.
- (4) In addition to the above information, the permittee shall also record the following information for each month for emissions units K004, P019-P028, as a group:
- a. The annual* number of gallons of each coating and cleanup material;
 - b. The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - c. The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - d. The annual* number of gallons of all coatings and cleanup materials.
- *Based upon a rolling, 12-month summation of the coating usage rates.
- (5) The permittee shall collect and record the following information regarding HAPs emissions each month for emissions units K004, P019-P028, as a group:
- a. the company identification of each coating and cleanup material employed;
 - b. the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the emission rate for each HAP from each coating and cleanup material employed [d)(5)b. x d)(5)c.], in lbs/month;
 - e. the total emission rate for each HAP from all coatings and cleanup materials employed [summation of d)(5)d.], in lbs/month;
 - f. the total HAP emission rate for the combination of all HAPs from all coatings and cleanup materials employed [summation of d)(5)e.], in lbs/month; and
 - g. the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date



identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall submit deviation (excursion) reports for emissions unit P017, which include the following information:
 - a. An identification of each day during which the average hourly OC emissions generated by the operating scenarios outlined in b)(2)a.ii. and b)(2)a.iii. exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions generated by the operating scenarios outlined in b)(2)a.ii. and b)(2)a.iii. exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which the average hourly OC emissions generated by the operating scenario outlined in b)(2)a.i. exceeded 4.67 pounds per hour, and the actual average hourly OC emissions for each such day.
 - (3) The permittee shall submit deviation (excursion) reports for emissions units K004, P019 - P028, as a group, which identify exceedances of any of the following:
 - a. Any exceedances of the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2).; and
 - b. Any exceedances of the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:

7.36 lbs OC/hr on days when employing exclusively non-photochemically reactive coatings and cleanup materials

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1).
 - b. Emission Limitation:

14.30 tons OC/yr from all coatings and cleanup materials.

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(2).



c. Emission Limitation:

8 lbs OC/hr, 40 lbs OC/day

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(1).

d. Emission Limitation:

Group limit of 93.86 tons VOC per rolling 12-month period based on coating usage and OC content restrictions

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(3).

e. Emission Limitation:

Group limit of 9.9 tons per rolling 12-month period of any individual HAP and 24.9 tons per rolling 12-month period of any combination of HAPs

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(5).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



6. Emissions Unit Group -Silk Screening Print #2: P023,P024,P025,P026,P027,P028,

EU ID	Operations, Property and/or Equipment Description
P023	Silk screen printing (2 VAW) (formerly permitted as R004)
P024	Silk screen printing (21 HPB) (formerly permitted as R005)
P025	Silk screen printing (20 HPB) (formerly permitted as R006)
P026	Silk screen printing (6 VAW) (formerly permitted as R007)
P027	Silk screen printing (19 HPB-B) (formerly permitted as R008)
P028	Silk screen printing (19 HPB-A) (formerly permitted as R009)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. g)(1).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)b., c)(1), c)(2), c)(3), d)(3), d)(4), d)(5), e)(3), f)(1)d. and f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	6.45 lbs OC/hr on days when employing exclusively non-photochemically reactive coatings and cleanup materials. [See b)(2)b.i.] 8.8 tons OC/yr from all coatings and cleanup materials. [See b)(2)b.iv.]
b.	OAC rule 3745-21-07(G)(2)	8 lbs OC/hr; 40 lbs OC/day [See b)(2)a.ii., b)(2)a.iii. and b)(2)b.]
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P019-P028: 93.86 tons VOC per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)c.]



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Group Limit for K004 and P019-P028: 9.9 tons per rolling 12-month period of any individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)c.]</p> <p>*Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act</p>

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

None.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

b)(1)b., b)(2)b.ii., b)(2)b.iii., d)(1), e)(2)a., e)(2)b. and f)(1)c.

- b. Each emissions unit will be subject to the following emissions limitations based on the type of coating and cleanup materials employed on a given day:
 - i. On days when exclusively non-photochemically reactive coatings and non-photochemically reactive cleanup materials are employed, OC emissions from the coating and cleanup operations are subject to an emissions limitation of 6.45 lbs OC/hr.
 - ii. On days when any portion of the coatings employed are photochemically reactive and the cleanup material is non-photochemically reactive, OC emissions from the coating operation (both photochemically reactive and non-photochemically reactive) are subject to an emissions limitation of 8 lbs/hr and 40 lbs/day. Note: OC emissions from the non-photochemically reactive cleanup materials are not counted towards compliance with



these emissions limitations, but are subject to an emissions limitation of 4334 lbs/month.

iii. On days when all or a portion of the cleanup materials employed are photochemically reactive, all OC emissions from the coating operation (both photochemically reactive and non-photochemically reactive) and OC emissions from photochemically reactive cleanup materials employed are subject to an emission limitation of 8 lbs/hr and 40 lbs/day. Note: OC emissions from the non-photochemically reactive cleanup materials are not counted towards compliance with these emissions limitations, but are subject to an emissions limitation of 883 lbs/month.

iv. Annual OC emissions cannot exceed 6.45 tons if photochemically reactive coatings and/or photochemically reactive cleanup materials are employed each and every day.

c. The permittee has requested federally enforceable limitations for emissions units K004 and P019-P028, of 93.86 tons VOC, 9.9 tons of any individual HAP, and 24.9 tons of combined HAPs per rolling, 12-month period, all based on content and gallon usage restrictions for the purpose of avoiding Title V applicability [See c)(1), c)(2) and c)(3)].

c) Operational Restrictions

(1) The permittee shall not employ any coating, as applied, in excess of 7.0 lbs VOC/gallon (process coatings) and 11.0 lbs VOC/gallon (machinist ink and/or special order process coatings).

(2) The maximum annual coating usage for emissions units K004, P019-P028 combined shall not exceed any of the following:

a. 3,050 gallons of coating with a maximum VOC content of 11.0 lbs/gallon of coating;

b. 25,067 gallons of coating with a maximum VOC content of 7.0 lbs/gallon of coating;

c. 25,067 gallons for all coatings combined.

The annual coating usage limitations shall be based upon a rolling, 12-month summation of the monthly coating usage rates.

Compliance with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the monthly coating usage rates.

(3) Combined annual HAP emissions from emissions units K004, P019-P028 shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination HAPs, based upon a rolling, 12-month summation of the monthly HAP emissions.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for each emissions unit:
 - a. The company identification for each coating and cleanup material employed with an identification of whether each material is a photochemically reactive material.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The organic compound (OC) content of each coating and cleanup material, in pounds per gallon.
 - d. The total OC emission rate for all coatings and cleanup materials [i.e. d)(1)b. x d)(1)c.], in pounds of OC per day calculated consistent with the limitations specified in paragraphs b)(2)a.i. through b)(2)a.iii.
 - e. The total number of hours the emissions unit was in operation.
 - f. The average hourly OC emission rate for all coatings and cleanup materials [i.e., d)(1)d./d)(1)e.], in pounds per hour (average) calculated consistent with the limitations specified in paragraphs b)(2)a.i. through b)(2)a.iii.
- (2) The permittee shall collect and record the following information for each month for each emissions unit:
 - a. The company identification for each coating and cleanup material employed.
 - b. Documentation on whether or not each coating and cleanup material is a photochemically reactive material.
 - c. The number of gallons of each coating and cleanup material employed.
 - d. The OC content of each coating and cleanup material, in lbs/gallon.
 - e. The OC emission rate for each coating and cleanup material [d)(2)c. x d)(2)d.], in lbs/month.
 - f. The total OC emission rate for all coating and cleanup materials [sum of d)(2)e.], in lbs/month.
 - g. The annual, year to date OC emission rate from all coating and cleanup material usage [sum of d)(2)f. for each calendar month to date from January to December].
- (3) The permittee shall collect and record the following information each month for emissions units K004, P019-P028, as a group:
 - a. The company identification for each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, in lbs OC/gallon;



- c. the number of gallons of each coating and cleanup material employed;
 - d. the VOC emission rate for each coating and cleanup material [d)(3)b. x d)(3)c. x 1 ton/2000 lbs.], in tons/month;
 - e. the total VOC emission rate for all coatings and cleanup materials [summation of d)(3)d.], in tons per month; and
 - f. the annual emissions of VOC, based on a rolling, 12-month period.
- (4) In addition to the above information, the permittee shall also record the following information for each month for emissions units K004, P019-P028, as a group:
- a. The annual* number of gallons of each coating and cleanup material;
 - b. The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - c. The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - d. The annual* number of gallons of all coatings and cleanup materials.
- *Based upon a rolling, 12-month summation of the coating usage rates.
- (5) The permittee shall collect and record the following information regarding HAPs emissions each month for emissions units K004, P019-P028, as a group:
- a. the company identification of each coating and cleanup material employed;
 - b. the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the emission rate for each HAP from each coating and cleanup material employed [d)(5)b. x d)(5)c.], in lbs/month;
 - e. the total emission rate for each HAP from all coatings and cleanup materials employed [summation of d)(5)d.], in lbs/month;
 - f. the total HAP emission rate for the combination of all HAPs from all coatings and cleanup materials employed [summation of d)(5)e.], in lbs/month; and
 - g. the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date



identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall submit deviation (excursion) reports for emissions unit P017, which include the following information:
 - a. An identification of each day during which the average hourly OC emissions generated by the operating scenarios outlined in b)(2)a.ii. and b)(2)a.iii. exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions generated by the operating scenarios outlined in b)(2)a.ii. and b)(2)a.iii. exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which the average hourly OC emissions generated by the operating scenario outlined in b)(2)a.i. exceeded 4.67 pounds per hour, and the actual average hourly OC emissions for each such day.
 - (3) The permittee shall submit deviation (excursion) reports for emissions units K004, P019 - P028, as a group, which identify exceedances of any of the following:
 - a. Any exceedances of the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2).; and
 - b. Any exceedances of the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:

6.45 lbs OC/hr on days when employing exclusively non-photochemically reactive coatings and cleanup materials

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1).
 - b. Emission Limitation:

8.8 tons OC/yr from all coatings and cleanup materials.

Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(2).



c. Emission Limitation:

8 lbs OC/hr, 40 lbs OC/day

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(1).

d. Emission Limitation:

Group limit of 93.86 tons VOC per rolling 12-month period based on coating usage and OC content restrictions

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(3).

e. Emission Limitation:

Group limit of 9.9 tons per rolling 12-month period of any individual HAP and 24.9 tons per rolling 12-month period of any combination of HAPs

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(5).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



**7. Emissions Unit Group -Window Assembly Line #1:
 P029,P030,P031,P032,P033,P034,P035,P036,P037,P040,**

EU ID	Operations, Property and/or Equipment Description
P029	Window assembly line 1.
P030	Window assembly line 2.
P031	Window assembly line 3.
P032	Window assembly line 4.
P033	Window assembly line 5.
P034	Window assembly line 6.
P035	Window assembly line 7.
P036	Window assembly line 8.
P037	Window assembly line 9.
P040	Window assembly line 12.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(5)

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)c., c)(1), c)(2), c)(3), c)(4), e)(2), f)(1)c. and f)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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) 7.30 tons OC/yr
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P019-P040:



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>93.86 tons VOC per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)c.]</p> <p>Group Limit for K004 and P019-P040: 9.9 tons per rolling 12-month period of any individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)d.]</p> <p>*Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act</p>

(2) Additional Terms and Conditions

- 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.
- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

None.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

None.
- c. The emissions of VOC from emissions units K004 and P019-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 c)(1) and c)(2)]. Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability [See c)(1)].



- d. 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 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) Operational Restrictions

- (1) The maximum annual coating usage for emissions units K004, P019-P028 combined shall not exceed any of the following:

- a. 3,050 gallons of coating with a maximum VOC content of 11.0 lbs/gallon of coating;
- b. 25,067 gallons of coating with a maximum VOC content of 7.0 lbs/gallon of coating;
- c. 25,067 gallons for all coatings combined.

- (2) Coating usage restrictions were initially established in Permit to Install (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.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for the operation:

- a. The company identification for each coating, adhesive and cleanup material employed;
- b. The number of gallons of each coating, adhesive and cleanup material employed;
- c. The OC content of each coating, adhesive and cleanup material employed, in lbs/gallon, as applied;
- d. The OC emission rate for each coating, adhesive and cleanup material employed, in lbs/day $[d)(1)b. \times d)(1)c.]$;
- e. The total OC emission rate for all coatings, adhesives and cleanup materials, in lbs/day $[the summation of d)(1)d.]$;



- f. The total number of hours the emission unit was in operation;
- g. The average hourly OC emissions rate for all coatings, adhesives and cleanup materials employed [d)(1)e./d)(1)f.], in lbs/hr (average) and

The company may calculate OC emission 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); and

- h. The annual, year-to-date OC emissions, in tons, from all coatings, adhesives and cleanup materials employed [the summation of d)(1)e.] for each calendar day to date from January to December.
- (2) The permittee shall collect and record the following information each month for emissions units K004, P019-P040, as a group:
- a. The company identification for each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, in lbs OC/gallon;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the VOC emission rate for each coating and cleanup material [d)(2)b. x d)(2)c. x 1 ton/2000 lbs.] in tons/month;
 - e. the total VOC emission rate for all coatings and cleanup materials [summation of (d)(2)d. in tons per month]; and
 - f. the annual emissions of VOC, based on a rolling, 12-month period.
- (3) In addition to the above information, the permittee shall also record the following information for each month for emissions units K004, P019-P040, as a group:
- a. The annual* number of gallons of each coating and cleanup material;
 - b. The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - c. The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - d. The annual* number of gallons of all coatings and cleanup materials.

*Based upon a rolling, 12-month summation of the coating usage rates.



- (4) The permittee shall collect and record the following information regarding HAPs emissions each month for emissions units K004, P019-P040, as a group:
- a. the company identification of each coating and cleanup material employed;
 - b. the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the emission rate for each HAP from each coating and cleanup material employed [d)(4)b. x d)(4)c. in lbs/month];
 - e. the total emission rate for each HAP from all coatings and cleanup materials employed [summation of d)(4)d. in lbs/month];
 - f. the total HAP emission rate for the combination of all HAPs from all coatings and cleanup materials employed [summation of d)(4)e. in lbs/month]; and
 - g. the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.
- (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 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.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



- (2) The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following:
 - a. Any exceedance of the maximum allowable usage raets and VOC content restrictions specified in c)(1) of this permit;
 - b. Any exceedances of the maximum emission limitations for each HAP and total combined HAPs specified in b)(2)d. of this permit for emissions units K004, and P019-P040 combined; and
 - c. Any exceedances of the 93.86 tons VOC per rolling, 12-month period for emissions units K004 and P019-P040 combined.
 - (3) The permittee shall submit deviation (excursion) reports for each emissions unit, which include the following information:
 - a. An identification of each day during which the average hourly OC emissions exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions exceeded 40 pounds per day, and the actual OC emissions for each such day.
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
8 lbs OC/hr, 40 lbs OC/day
Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1).
 - b. Emission Limitation:
7.3 tons OC/yr
Applicable Compliance Method:
Compliance shall be based on the recordkeeping requirements as specified in d)(1)h.
 - c. Emission Limitation:
Group limit of 93.86 tons VOC per rolling 12-month period based on coating usage and OC content restrictions



Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(3).

d. Emission Limitation:

Group limit of 9.9 tons per rolling 12-month period of any individual HAP and 24.9 tons per rolling 12-month period of any combination of HAPs

Applicable Compliance Method:

Compliance shall be based on the recordkeeping requirements as specified in d)(4).

g) Miscellaneous Requirements

(1) None.



8. Emissions Unit Group -Window Assembly Lines #2: P041,P042,P043,

EU ID	Operations, Property and/or Equipment Description
P041	Window Assembly Line number 13. Assemble, primer application, and soldering.
P042	Window assembly line number 14. Assembly, primer application, adhesive application, and soldering.
P043	Window assembly line number 15. Assembly, primer application

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. g)(1).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)c., b)(2)d., c)(1), d)(3), d)(4), d)(5), e)(1), f)(1)b., f)(1)c., f)(1)d., and f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(1)a.
b.	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day [see b)(2)b.]
c.	OAC rule 3745-31-05(D)	93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P043 combined [see b)(2)c.] 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



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		P017-P043 combined [see b)(2)d.]
d.	ORC 3704.03(F) and OAC rule 3745-114-01	See g)(1).

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from emission units P041, P042, and P043 since the calculated annual emission rate for OC is less than ten tons per year for each emissions unit taking into account the federally enforceable rule limit of 40 pounds per day under OAC 3745-21-07(G)(2) for coating and adhesive operations and the uncontrolled potential to emit for associated cleanup operations.

b. The 8 pounds per hour and 40 pounds per day OC limitations apply to emissions associated the application of primer and adhesive materials. Emissions associated with cleanup operations do not apply to the 8 pounds per hour and 40 pounds per day OC limitations [see c)(2)].

On February 18, 2008 Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The new OAC rule 3745-21-07 does not establish any requirements for this emissions unit. However, the rule rescindment and new rule have not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07, the requirement to comply with OAC rule 3745-21-07 (G) (2) still exists as part of the federally-approved SIP of Ohio.

c. The emissions of VOC from emissions units K004 and P017-P043 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 c)(1) and c(2)]. Federally enforceable VOC limitations are being established for purpose of avoiding Title V applicability.

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402 issued on February 27, 2001 and, as such, rolling VOC 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.

d. HAP* emissions from emissions units K004 and P017-P043 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.

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

c) Operational Restrictions

- (1) The maximum annual coating usage for emissions units K004 and P017-P043, 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 per rolling 12-month period;
 - b. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon per rolling 12-month period; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling 12-month period.

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.

- (2) The use of photochemically reactive material for cleanup material, as defined in OAC rule 3745-21-01, is prohibited in emission units P041, P042, and P043.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for cleanup material employed in emissions units P041, P042, and P043 combined:
 - a. the name and identification number of each cleanup material employed;
 - b. documentation on whether or not each cleanup material is a photochemically reactive material.

[the definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01.]



- (2) The permittee shall collect and record the following information for each day for each emissions unit (P041, P042, and P043) separately:
- a. the company identification for each coating and adhesive employed;
 - b. the number of gallons of each coating and adhesive employed;
 - c. the organic compound content of each coating and adhesive, in pounds per gallon;
 - d. the total organic compound emission rate for all coatings and adhesives, in pounds per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all coatings and adhesives, i.e., "d." divided by "c.", in pounds per hour (average).
- [Note: The coating information must be for the coatings and adhesives as employed, including any thinning solvents added at the emissions unit.]
- (3) 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-P043 combined:
- a. the name and identification number of each coating, adhesive and cleanup materials;
 - b. the VOC content of each coating, adhesive, and cleanup material, in pounds per 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." times "c."), in pounds;
 - 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.
- (4) The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, and P017-P043 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" times "c") for each individual coating, adhesive, and cleanup material], in pounds per month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, (summation of "d" for all HAPs), in pounds per month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, in tons, based upon a rolling 12-month summation.
- (5) 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-P043 combined:
- 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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 93.86 tons VOC per rolling 12-month period for emission units K004, and P017 – P043 combined.
 - ii. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 pounds per gallon per rolling 12-month period for emission units K004, and P017 – P043 combined.



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- iii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 pounds per gallon per rolling 12-month period for emission units K004, and P017 – P043 combined.
 - iv. 25,067 gallons of coating, adhesive, and cleanup material per rolling 12-month period for emission units K004, and P017 – P043 combined.
 - v. 9.90 tons per rolling 12-month period of any individual HAP for emission units K004, and P017 – P043 combined.
 - vi. 24.90 tons per rolling 12-month period of any combination of HAPs for emission units K004, and P017 – P043 combined.
- b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

Emissions of organic compounds (OC) shall not exceed 8 pounds per hour and 40 pounds per day

Applicable Compliance Method:

Compliance shall be demonstrated through the recordkeeping requirements specified in d)(2).



b. Emission Limitation:

93.86 tons VOC per rolling 12-month period for emissions units K004, and P017-P043 combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the recordkeeping requirements specified in d)(3).

c. Emission Limitations:

The maximum annual coating usage for emissions units K004 and P017-P043 combined shall not exceed any of the following:

- i. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon per rolling 12-month period;
- ii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon per rolling 12-month period; and
- iii. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated through the recordkeeping requirements specified in d)(5).

d. Emission Limitation:

9.90 tons per rolling 12-month period of any individual HAP for emission units K004, and P017 – P043 combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the recordkeeping requirements specified in d)(4).

e. Emission Limitation:

24.90 tons per rolling 12-month period of any combination of HAPs for emission units K004, and P017 – P043 combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the recordkeeping requirements specified in d)(4).



g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the maximum annual emissions for each toxic air contaminant (from emission units P041, P042, and P043 combined), as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



9. Emissions Unit Group -Window Assembly Lines #3: P044,P045,P046,P047,

EU ID	Operations, Property and/or Equipment Description
P044	Window Assembly Line #16
P045	Window Assembly Line #17
P046	Window Assembly Line #18
P047	Window Assembly Line #19

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b., and g)(1).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)d., b)(2)e., b)(2)f., b)(2)g., c)(1), d)(2)a, d)(2)b, d)(2)d., d)(2)f., d)(2)h., d)(2)j., d)(3), d)(4), d)(5), e)(1) and f(1)b. – f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	7.30 tons organic compounds (OC)/yr, from the coating and adhesive operations See b)(2)a.
b.	OAC rule 3745-31-05(A), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day [See b)(2)c. and b)(2)d.]
d.	OAC rule 3745-31-05(D)	Volatile organic compounds (VOC) emissions shall not exceed 40 lbs/day. [See b)(2)e.] 93.86 tons VOC per rolling, 12-month period for emissions units K004, P017 and P019-P047, combined [See b)(2)f.]



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		9.90 tons per rolling, 12-month period for any individual Hazardous Air Pollutant (HAP*) and 24.90 tons per rolling, 12-month period for any combination of HAPs for emissions units K004, P017 and P019-P047, combined [See b)(2)g.]
e.	ORC 3704.03(F) and OAC rule 3745-114-01	See g)(1)

(2) Additional Terms and Conditions

a. The following requirements contained in this permit satisfy Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:

- i. annual emission limitation of 7.30 tons OC/year for coating and adhesive operations. [Emissions from cleanup operations for an individual window assembly line are negligible and; therefore, have not been addressed by an individual emission limitation for each window assembly line. Emissions from cleanup operations are included in the combined VOC limitation established under OAC rule 3745-31-05(D)];
- ii. compliance with the requirements of OAC rule 3745-21-07(G)(2); and
- iii. compliance with the requirements established under OAC rule 3745-31-05(D).

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the VOC emissions



from emissions units P044, P045, P046 and P047 since the calculated annual emission rate for VOC is less than ten tons per year for each emissions unit taking into account the federally enforceable limitation of 40 lbs VOC/day established under OAC rule 3745-31-05(D) and the uncontrolled potential to emit for associated cleanup operations.

- c. The 8 lbs/hr and 40 lbs/day OC limitations apply to emissions associated with the application of primer and adhesive materials. Emissions associated with cleanup operations do not apply to the 8 lbs/hr and 40 lbs/day OC limitations [See c)(2)].
- d. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

[b)(2)d., c)(2), d)(1), d(2)c., d(2)e., d)(2)g., d(2)j., and f)(1)a.]

- e. The emissions of VOC from an individual window assembly line shall not exceed 40 pounds per day. The VOC limitation is a federally enforceable limitation included in this permit for purposes of establishing the potential to emit for an individual window assembly line.
- f. The emissions of VOC from emissions units K004, P017 and P019-P047, 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 c)(1) and c)(2)]. Federally enforceable VOC limitations are being established for purposes of avoiding Title V applicability.

Rolling emissions limitations have been established in Permit to Install (PTI) #03-13402 issued on February 27, 2001 and, as such, rolling, VOC 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.

- g. HAP* emissions from emissions units K004 P017 and P019-P047, combined, 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 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.

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

c) Operational Restrictions

- (1) The maximum annual coatings usage for emissions units K004, P017 and P019-P047, combined, shall not exceed any of the following:
 - a. 3,050 gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 11.0 lbs/gallon per rolling, 12-month period;
 - b. 25,067 gallons of coatings, adhesives, and cleanup materials with a maximum VOC content of 7.0 lbs/gallon per rolling, 12-month period; and
 - c. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling, 12-month period.

Coating usage restrictions were initially established in PTI #03-13402, issued on February 27, 2001, and as such, rolling coatings 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.

- (2) The use of any photochemically reactive cleanup material, as defined in OAC rule 3745-21-01, is prohibited in emissions units P044, P045, P046 and P047.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the cleanup materials employed in emissions units P044, P045, P046 and P047:
 - a. the name and identification number of each cleanup material employed;
 - b. documentation on whether or not each cleanup material is a photochemically reactive material.

[the definition of "photochemically reactive" is based upon OAC rule 3745-21-01 (C)(5).]
- (2) The permittee shall collect and record the following information for each day for each emissions unit (P044, P045, P046 and P047) separately:
 - a. the company identification for each coating and adhesive employed;
 - b. the number of gallons of each coating and adhesive employed;



- c. the organic compound content of each coating and adhesive, in pounds per gallon;
- d. the volatile organic compound content of each coating and adhesive, in pounds per gallon;
- e. the organic compound emission rate from each coating and adhesive, in pounds per day [d)(2)b. times d)(2)c.];
- f. the volatile organic compound emission rate from each coating and adhesive, in pounds per day [d)(2)b times d)(2)d.];
- g. the total organic compound emission rate for all coatings and adhesives, in pounds per day [summation of d)(2)e.];
- h. the total volatile organic compound emission rate for all coatings and adhesives, in pounds per day [summation of d)(2)f.];
- i. the total number of hours the emissions unit was in operation;
- j. the average hourly organic compound emission rate for all coatings and adhesives, d)(2)g. divided by d)(2)i., in pounds per hour (average); and
- k. the average hourly volatile organic compound emission rate for all coatings and adhesives, d)(2)h. divided by d)(2)i., in pounds per hour (average)

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

- (3) 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, P017 and P019-P047, combined:
 - a. the name and identification number of each coating, adhesive and cleanup materials;
 - b. the VOC content of each coating, adhesive, and cleanup material, in pounds per 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 [d)(3)b. x d)(3)c.], in pounds;
 - e. the total VOC emission rate from all the coatings, adhesives, and cleanup materials employed [summation of d)(3)d.]; and
 - f. the total annual emissions of VOC, in tons, based on a rolling, 12-month summation.



- (4) The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K004, P017 and P019-P047, 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 $d)(4)b. \times d)(4)c.$ for each individual coating, adhesive, and cleanup material], in pounds per month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, adhesives, and cleanup materials employed, [summation of $d)(4)d.$ for all HAPs], in pounds per month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, in tons, based upon rolling, 12-month summations.
- (5) In addition to the above information, the permittee shall also collect and record the following information for each month for emissions units K004, P017 and P019-P047, combined:
- 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 monthly coatings, adhesive and cleanup material usage rates

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 93.86 tons VOC per rolling, 12-month period for emission units K004, P017 and P019- P047, combined.



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- ii. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 pounds per gallon per rolling, 12-month period for emissions units K004, P017 and P019- P047, combined.
 - iii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 pounds per gallon per rolling, 12-month period for emission units K004, P017 and P019- P047, combined.
 - iv. 25,067 gallons of coating, adhesive, and cleanup material per rolling, 12-month period for emission units K004, P017 and P019- P047, combined.
 - v. 9.90 tons per rolling 12-month period of any individual HAP for emissions units K004, P017 and P019- P047, combined.
 - vi. 24.90 tons per rolling 12-month period of any combination of HAPs for emissions units K004, P017 and P019- P047, combined.
 - vii. 40 lbs VOC per day from coating and adhesive operations.
- b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

Emissions of OC shall not exceed 8 pounds per hour and 40 pounds per day



Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(2).

- b. VOC emissions shall not exceed 40 lbs/day

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(2).

- c. Emission Limitation:

93.86 tons VOC per rolling, 12-month period for emissions units K004, P017 and P019- P047.combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(3).

- d. Emission Limitations:

The maximum annual coatings usage for emissions units K004, P017 and P019- P047, combined, shall not exceed any of the following:

- i. 3,050 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 11.0 lbs/gallon per rolling, 12-month period;
- ii. 25,067 gallons of coating, adhesive, and cleanup material with a maximum VOC content of 7.0 lbs/gallon per rolling, 12-month period; and
- iii. 25,067 gallons for all coatings, adhesives, and cleanup materials combined per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(5).

- e. Emission Limitation:

9.90 tons per rolling, 12-month period of any individual HAP for emission units K004, P017 and P019- P047, combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(4).



f. Emission Limitation:

24.90 tons per rolling 12-month period of any combination of HAPs for emission units K004, P017 and P019- P047, combined.

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in d)(4).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the maximum annual emissions for each toxic air contaminant (from emission units P044, P045, P046 and P047 combined), as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.