

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

1/7/2014

Certified Mail

Mr. Andy Ustaszewski
Pittsburgh Glass Works, LLC
5066 Lincoln Highway
Crestline, OH 44827

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0370000217
Permit Number: P0115052
Permit Type: Renewal
County: Richland

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/survey.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:	P0115052
Permit Type:	Renewal
Issued:	1/7/2014
Effective:	1/7/2014
Expiration:	1/7/2019



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

Table of Contents

Authorization	1
A. Standard Terms and Conditions	5
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	6
2. Who is responsible for complying with this permit?	6
3. What records must I keep under this permit?	6
4. What are my permit fees and when do I pay them?.....	6
5. When does my PTIO expire, and when do I need to submit my renewal application?	6
6. What happens to this permit if my project is delayed or I do not install or modify my source?	7
7. What reports must I submit under this permit?	7
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?	7
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	7
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	8
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	8
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	8
13. Can I transfer this permit to a new owner or operator?.....	9
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	9
15. What happens if a portion of this permit is determined to be invalid?	9
B. Facility-Wide Terms and Conditions.....	10
C. Emissions Unit Terms and Conditions	12
1. P007, 100 LB/HR SANDBLASTER	13
2. P017, North Room 2	16
3. P038, Window Assy Line #10.....	22
4. P039, Window Assy Line #11.....	29
5. Emissions Unit Group -1& 5 DBO Silk Screen Printing: P019,P020,P021,P022,	36
6. Emissions Unit Group -Silk Screen Printg.VAW,HPB Lines: P023,P024,P025,P026,P027,P028,	42
7. Emissions Unit Group -Window Assembly Line #1: P029,P030,P031,P032,P033,P034,P035,P036,P037,P040,	48
8. Emissions Unit Group -Window Assembly Lines #2: P041,P042,P043,.....	55



9. Emissions Unit Group -Window Assembly Lines #3: P044,P045,P046,P047, 61



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0115052
Facility ID: 0370000217
Effective Date: 1/7/2014

Authorization

Facility ID: 0370000217
Application Number(s): A0048125, A0048916
Permit Number: P0115052
Permit Description: Renewal FEPTIO for a glass product manufacturing facility.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 1/7/2014
Effective Date: 1/7/2014
Expiration Date: 1/7/2019
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: P0115052

Permit Description: Renewal FEPTIO for a glass product manufacturing facility.

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

Emissions Unit ID:	P007
Company Equipment ID:	100 LB/HR SANDBLASTER
Superseded Permit Number:	P0028343
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P017
Company Equipment ID:	North Room 2
Superseded Permit Number:	03-13402
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P038
Company Equipment ID:	Window Assy Line #10
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P039
Company Equipment ID:	Window Assy Line #11
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable

Group Name: 1& 5 DBO Silk Screen Printing

Emissions Unit ID:	P019
Company Equipment ID:	1 DBO-A
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P020
Company Equipment ID:	1 DBO-B
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P021
Company Equipment ID:	5 DBO-A
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P022
Company Equipment ID:	5 DBO-B
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable

Group Name: Silk Screen Printg.VAW,HPB Lines

Emissions Unit ID:	P023
Company Equipment ID:	2 VAW
Superseded Permit Number:	P0112839
General Permit Category and Type:	Not Applicable



Emissions Unit ID:	P024
Company Equipment ID:	21 HPB
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P025
Company Equipment ID:	20 HPB
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P026
Company Equipment ID:	6 VAW
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P027
Company Equipment ID:	19 HPB-B
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P028
Company Equipment ID:	19 HPB-A
Superseded Permit Number:	P0112839
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:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P030
Company Equipment ID:	Window Assy Line #2
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P031
Company Equipment ID:	Window Assy Line #3
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P032
Company Equipment ID:	Window Assy Line #4
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P033
Company Equipment ID:	Window Assy Line #5
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P034
Company Equipment ID:	Window Assy Line #6
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P035
Company Equipment ID:	Window Assy Line #7
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P036
Company Equipment ID:	Window Assembly Line #8
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable



Emissions Unit ID:	P037
Company Equipment ID:	Window Assy Line #9
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P040
Company Equipment ID:	Window Assy Line #12
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable

Group Name: Window Assembly Lines #2

Emissions Unit ID:	P041
Company Equipment ID:	P041
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P042
Company Equipment ID:	Window Assembly Line #14
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P043
Company Equipment ID:	Window Assembly Line #15
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable

Group Name: Window Assembly Lines #3

Emissions Unit ID:	P044
Company Equipment ID:	P044
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P045
Company Equipment ID:	P045
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P046
Company Equipment ID:	P046
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P047
Company Equipment ID:	P047
Superseded Permit Number:	P0112839
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0115052
Facility ID: 0370000217
Effective Date: 1/7/2014

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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] 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 submitting 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 emission 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.



Final Permit-to-Install and Operate
Pittsburgh Glass Works, LLC
Permit Number: P0115052
Facility ID: 0370000217
Effective Date: 1/7/2014

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: P0115052
Facility ID: 0370000217
Effective Date: 1/7/2014

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Pittsburgh Glass Works, LLC

Permit Number: P0115052

Facility ID: 0370000217

Effective Date: 1/7/2014

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: P0115052
Facility ID: 0370000217
Effective Date: 1/7/2014

C. Emissions Unit Terms and Conditions



1. P007, 100 LB/HR SANDBLASTER

Operations, Property and/or Equipment Description:

100 lb/hr sandblaster with baghouse

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. None.

(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. None.

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)	0.07 lb particulate matter (PM)/hr and 0.30 ton of PM/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(1)	See b)(2)c.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) requirements for this emission unit have been determined to be the use of a baghouse and compliance with the terms and conditions of this permit.

b. All PM emissions are considered equivalent to PM10.

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



c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all times during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

0.07 lbs of PM/hr and 0.30 ton of PM/yr

Applicable Compliance Method:

The hourly emission limitation was developed by multiplying the PM emission factor of 69 lbs of PM/1,000 lbs sand used* by the maximum process weight rate of 100 lbs of sand/hr, then applying the control efficiency of 99 percent.

*based on emission factor in AP-42, Table 13.2.6-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 of 40 CFR, Part 60, Appendix A, and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.

The annual PM limitation was developed by multiplying the hourly PM limitation by the maximum operating schedule of 8,760 hrs/yr, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible PE shall not exceed 20 percent opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



2. P017, North Room 2

Operations, Property and/or Equipment Description:

Silk screen printing (North room 2)

- 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)(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)	1,216 lbs volatile organic compounds (VOC)/month from coating and cleanup materials; 7.3 tons VOC/yr from all coating and cleanup materials
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-P047: 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 P017, P019-P047: 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. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017 and P019-P047 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, P017, P019-P047 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 each month for emissions unit P017:



- a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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, P017, P019-P047, 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, P017, P019-P047, 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:

1,216 lbs VOC/hr from all coating and cleanup materials

Applicable Compliance Method:

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

b. Emission Limitation:

7.30 tons VOC/yr from all coatings and cleanup materials.

Applicable Compliance Method:

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

c. Emission Limitation:

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

Applicable Compliance Method:

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

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: P0115052

Facility ID: 0370000217

Effective Date: 1/7/2014

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.



3. 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)b., c)(1), c)(2), c)(3), d)(2), d)(3), d)(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)	1,216 lbs volatile organic compounds (VOC)/month from coating and cleanup materials; 7.3 tons VOC/yr from all coating and cleanup materials
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-P047: 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 P017, P019-P047: 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. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017 and P019-P047 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, P017, P019-P047 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 each month for emissions unit P038:



- a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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, P017, P019-P047, 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, P017, P019-P047, 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:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:
1,216 lbs of VOC/month

Applicable Compliance Method:

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



Applicable Compliance Method:

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

c. Emission Limitation:

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

Applicable Compliance Method:

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

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.



4. 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. 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)b., c)(1), c)(2), c)(3), d)(2), d)(3), d)(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)	1,216 lbs volatile organic compounds (VOC)/month from coating and cleanup materials; 7.3 tons VOC/yr from all coating and cleanup materials
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	OAC rule 3745-31-05 (D)	Group Limit for K004 and P017, P019-P047: 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 P017, P019-P047: 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. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017 and P019-P047 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, P017, P019-P047 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 each month for emissions unit P039:



- a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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, P017, P019-P047, 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, P017, P019-P047, 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:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:
1,216 lbs of VOC/month

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



Applicable Compliance Method:

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

c. Emission Limitation:

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

Applicable Compliance Method:

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

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.



5. Emissions Unit Group -1& 5 DBO Silk Screen Printing: P019,P020,P021,P022,

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

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)(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)	2,383 lbs volatile organic compounds (VOC)/month from coating and cleanup materials for each emissions unit; 14.30 tons VOC/yr from all coatings and cleanup materials for each emissions unit
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-P047: 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 P017, P019-P047: 9.9 tons per rolling 12-month period of any individual HAP* and 24.9



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

(2) Additional Terms and Conditions

- a. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017 and P019-P047 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, P017, P019-P047 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 each month for P019, P020, P021 and P022 individually:
 - a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed in each emissions unit [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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 [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, P017, P019-P047, 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, P017, P019-P047, 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).



- 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:

2,383 lbs of VOC/month for each emissions unit individually

Applicable Compliance Method:

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

- b. Emission Limitation:

14.3 tons VOC/yr from each emissions unit individually

Applicable Compliance Method:

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

- c. Emission Limitation:

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

Applicable Compliance Method:

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



Final Permit-to-Install and Operate

Pittsburgh Glass Works, LLC

Permit Number: P0115052

Facility ID: 0370000217

Effective Date: 1/7/2014

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) 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 Screen Printg.VAW,HPB Lines: P023,P024,P025,P026,P027,P028,

EU ID	Operations, Property and/or Equipment Description
P023	Silk screen printing (2 VAW)
P024	Silk screen printing (21 HPB)
P025	Silk screen printing (20 HPB)
P026	Silk screen printing (6 VAW)
P027	Silk screen printing (19 HPB-B)
P028	Silk screen printing (19 HPB-A)

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)(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)	1,466 lbs volatile organic compounds (VOC)/month from coating and cleanup materials for each emissions unit; 8.8 tons VOC/yr from all coatings and cleanup materials for each emissions unit.
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-P047: 93.86 tons volatile organic compounds (VOC) per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)b.]



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Group Limit for K004 and P017, P019-P047: 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.] *Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act

(2) Additional Terms and Conditions

- a. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017, and P019-P047 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, P017, P019-P047 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 each month for P023, P024, P025, P026, P027 and P028 individually:
- a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed in each emissions unit [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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 [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, P017, P019-P047, 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, P017, P019-P047, 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
- 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:

1,466 lbs of VOC/month for each emissions unit individually

Applicable Compliance Method:

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

- b. Emission Limitation:

8.8 tons VOC/yr from each emissions unit individually

Applicable Compliance Method:

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

- c. Emission Limitation:

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



Final Permit-to-Install and Operate

Pittsburgh Glass Works, LLC

Permit Number: P0115052

Facility ID: 0370000217

Effective Date: 1/7/2014

Applicable Compliance Method:

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

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) 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)b., c)(1), c)(2), c)(3), d)(2), d)(3), d)(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)	1,216 lbs of volatile organic compounds (VOC)/month from coating and cleanup materials for each emissions unit; 7.30 tons VOC/yr from coating and cleanup materials for each emissions unit
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>P047: 93.86 tons volatile organic compounds (VOC) per rolling 12-month period based on coating usage and VOC content restrictions [See b)(2)b.]</p> <p>Group Limit for K004 and P017, P019-P047: 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.]</p> <p>*Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act</p>

(2) Additional Terms and Conditions

- a. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- b. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017, and P019-P047 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, P017, P019-P047 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 each month for P029, P030, P031, P032, P032, P033, P034, P035, P036, P037 and P040 individually:
- a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed in each emissions unit [summation of d)(1)g. for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, 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 VOC/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 [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, P017, P019-P047, 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, P017, P019-P047, 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:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and



- f. 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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:

1,216 lbs of VOC/month from coating and cleanup materials for each emissions unit individually

Applicable Compliance Method:

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

b. Emission Limitation:

7.3 tons VOC/yr from from coating and cleanup materials for each emissions unit individually

Applicable Compliance Method:

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

c. Emission Limitation:

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

Applicable Compliance Method:

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

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)d., b)(2)d., c)(1), c)(2), c)(3), d)(2), d)(3), d)(4), e)(2), 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), as effective 11/30/01	7.3 tons of VOC/yr from coating and cleanup material for each emissions unit See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)b.
c.	OAC rule 3745-21-07(M)	See b)(2)c.
d.	OAC rule 3745-31-05(D)	Group Limit for K004 and P017, P019-P047: 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 P017, P019-P047: 9.9 tons per rolling 12-month



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		period of any individual HAP* and 24.9 tons per rolling 12-month period of any combination of HAPs [See b)(2)b.] *Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act
e.	ORC 3704.03(F) and OAC rule 3745-114-01	See g)(1).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

 The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the volatile organic compound (VOC) emissions from these air contaminant sources since the uncontrolled potential to emit for VOC individually is less than ten tons per year.
- c. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- d. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017, and P019-P047 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, P017, P019-P047 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 each month for P041, P042 and P043 individually:
 - a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating and cleanup materials employed in each emissions unit [summation of d)(1)g. for each calendar month to date from January to December].



- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, as a group:
- The company identification for each coating and cleanup material employed;
 - the VOC content of each coating and cleanup material, in lbs VOC/gallon;
 - the number of gallons of each coating and cleanup material employed;
 - 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;
 - the total VOC emission rate for all coatings and cleanup materials [summation of $d)(2)d.$ in tons per month]; and
 - 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, P017, P019-P047, as a group:
- The annual* number of gallons of each coating and cleanup material;
 - The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - 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, P017, P019-P047, as a group:
- the company identification of each coating and cleanup material employed;
 - the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - the number of gallons of each coating and cleanup material employed;
 - the emission rate for each HAP from each coating and cleanup material employed $[d)(4)b. \times d)(4)c.]$ in lbs/month;
 - the total emission rate for each HAP from all coatings and cleanup materials employed [summation of $d)(4)d.]$ in lbs/month;
 - 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
 - the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.



e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:
7.3 tons VOC/yr from from coating and cleanup materials for each emissions unit individually



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 and cleanup 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 "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. 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., c)(1), c)(2), c)(3), d)(2), d)(3), d)(4), e)(2), 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), as effective 11/30/01	7.30 tons volatile organic compounds (VOC)/yr, from the coating and adhesive operations for each emissions unit See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-21-07(M)	See b)(2)d.
d.	OAC rule 3745-31-05(D)	Volatile organic compounds (VOC) emissions shall not exceed 40 lbs/day. 93.86 tons VOC per rolling, 12-month period for emissions units K004, P017 and P019-P047, combined 9.90 tons per rolling, 12-month period for any individual Hazardous Air Pollutant



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

(2) Additional Terms and Conditions

a. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

b. 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).

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the volatile organic compound (VOC) emissions from these air contaminant sources since the uncontrolled potential to emit for VOC individually is less than ten tons per year.

d. These emissions units are not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

e. The permittee has requested federally enforceable limitations for emissions units K004 and P017, P019-P047, 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, P017, and P019-P047 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, P017, P019-P047 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 each month for P044, P045, P046 and P047 individually:
 - a. the name and identification number of each coating employed;
 - b. the VOC content of each coating, as applied, in pounds per gallon;
 - c. the number of gallons of each coating employed;
 - d. the total number of gallons of all coatings employed;
 - e. the annual coating usage for all coatings employed, based upon a rolling 12-month summation of the monthly usage rates;
 - f. the VOC emission rate for each coating, in pounds per month;
 - g. the total VOC emission rate for all coatings, in pounds or tons per month; and
 - h. the total VOC emissions from all coating materials employed in each emissions unit [summation of d)(1)g. for each calendar month to date from January to December].



- (2) The permittee shall collect and record the following information each month for emissions units K004, P017, P019-P047, as a group:
- The company identification for each coating and cleanup material employed;
 - the VOC content of each coating and cleanup material, in lbs VOC/gallon;
 - the number of gallons of each coating and cleanup material employed;
 - 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;
 - the total VOC emission rate for all coatings and cleanup materials [summation of $d)(2)d.$ in tons per month]; and
 - 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, P017, P019-P047, as a group:
- The annual* number of gallons of each coating and cleanup material;
 - The annual* number of gallons of coatings with a maximum VOC content of 7.0 lbs/gallon of coating and cleanup material;
 - The annual* number of gallons of coatings with a maximum VOC content of 11.0 lbs/gallon of coating and cleanup material; and
 - 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, P017, P019-P047, as a group:
- the company identification of each coating and cleanup material employed;
 - the lbs per gallon of each HAP in each coating and cleanup material, as applied;
 - the number of gallons of each coating and cleanup material employed;
 - the emission rate for each HAP from each coating and cleanup material employed $[d)(4)b. \times d)(4)c.]$ in lbs/month;
 - the total emission rate for each HAP from all coatings and cleanup materials employed [summation of $d)(4)d.$] in lbs/month;
 - 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
 - the emissions of each HAP and the combination of all HAPs, based on a rolling, 12-month period.



e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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 quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. the 93.86 tons VOC per rolling, 12-month period emission limitation;
 - ii. the maximum allowable gallon usage rates and VOC content limitations specified in paragraphs c)(1) and c)(2); and
 - iii. the maximum emissions limitations for each HAP and total combined HAPs specified in paragraph c)(3).
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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 Limitation:
7.3 tons VOC/yr from coating materials for each emissions unit individually



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 and cleanup 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 "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.