



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: June 11, 2009

RE: Pittsburgh Glass Works, LLC / 163-27777-00094

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Ms. Sallee
Pittsburgh Glass Works, LLC
424 East Inglefield Road
Evansville, IN 47725

June 11, 2009

Re: 163-27777-00094
First Notice-Only Change to
M163-23830-00094

Dear Ms. Sallee

Pittsburgh Glass Works, LLC was issued a Minor Source Operating Permit (MSOP) Renewal No. M163-23830-00094 on December 30, 2008 for a stationary transportation transparency manufacturing source, located at 424 East Inglefield Road, Evansville, Indiana 47725. On April 14, 2008, the Office of Air Quality (OAQ) received an application from the source relating to the construction and operation of a three (3) new prime and assembly lines and one (1) new clip priming machine that are of the same type as the other permitted prime and assembly area and soldering lines. The new prime assembly lines and clip priming machine will comply with the same applicable requirements and permit terms and conditions as the prime and assembly area and soldering lines, but will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3. In addition, the source has notified IDEM that boiler #1 is no longer in operation. As a result, the source has requested that IDEM remove all references to boiler #1 from the permit and update the potential to emit calculations (see Appendix A). Finally, the source requested that the potential to emit calculations be updated to include SO₂ emissions from the existing sulfur dioxide application process (See Appendix A). The uncontrolled/unlimited potential to emit of the entire source will continue to be less than the threshold levels specified in 326 IAC 2-7 (see Appendix A). The addition of the new prime assembly lines and clip priming machine to the permit is considered a notice-only change, since the potential emissions of regulated criteria pollutants and hazardous air pollutants are less than the ranges specified 326 IAC 2-6.1-6(g)(4) and 326 IAC 2-6.1-6(d)(10), respectively (see Appendix A) and pursuant to 326 IAC 2-6.1-6(d)(13).

State Rule Applicability Determination

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 - (1) The burnishing process performed in prime and assembly lines #1 and #3 is exempt from the requirements of 326 IAC 6-3-2, because the potential particulate emissions from prime and assembly lines #1 and #3 are less than five hundred fifty one thousandths (0.551) pound per hour, each.
 - (2) Pursuant to 326 IAC 6-3-2(b)(5), (6), (7), and (8) the three (3) prime and assembly lines and the one (1) clip priming machine are exempt from the requirements of 326 IAC 6-3-2 when applying coatings using dip, roll, flow, or brush application methods.
- (b) 326 6.5-1-1 (Particulate Matter Limitations Except Lake County)

The three (3) prime and assembly lines and the one (1) clip priming machine are not subject to the requirements of 326 IAC 6.5-1, since the potential to emit PM is less than 100 tons per year and the actual PM emissions are less than 10 tons per year from each emission unit.
- (c) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The three (3) prime and assembly lines and the one (1) clip priming machine are not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

- (d) 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)
This facility is not an automobile and light duty truck coating operation. Therefore, 326 IAC 8-2-2 is not applicable.
- (e) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The requirements of 326 IAC 8-2-9 are not applicable to the three (3) prime and assembly lines and the one (1) clip priming machine because they do not coat metal parts.
- (f) 326 IAC 8-10 (Automobile Refinishing)
This facility is not located in Clark, Floyd, Lake, or Porter Counties and does not refinish motor vehicles or mobile equipment. Therefore, 326 IAC 8-10 is not applicable.

Pursuant to the provisions of 326 IAC 2-6.1-6, the permit is hereby revised as follows with the deleted language as ~~strikeouts~~ and new language **bolded**.

...
A.2 Emission Units and Pollution Control Equipment Summary

- (c) **One (1) prime and assembly line, identified as Prime and Assembly Line #1, approved for construction in 2009, with a maximum capacity of 50 parts per hour, consisting of a foam tip primer applicator and one (1) soldering station, and exhausting through Stack 303.**
- (d) **One (1) prime and assembly line, identified as Prime and Assembly Line #2, approved for construction in 2009, with a maximum capacity of 300 parts per hour, consisting of a foam tip primer applicator, and exhausting through Stack 303.**
- (e) **One (1) prime and assembly line, identified as Prime and Assembly Line #3, approved for construction in 2009, with a maximum capacity of 60 parts per hour, consisting of a foam tip primer applicator and one (1) soldering station, and exhausting through Stack 303.**
- (f) **One (1) clip priming machine, identified as Clip Priming Machine, approved for construction in 2009, with a maximum capacity of 600 parts per hour, consisting of a dip primer applicator, and exhausting through Stack 303.**
- (eg) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
- (eh) ~~Three~~ **Two (32)** natural gas-fired boilers, known as boiler ~~#12 through~~ **and #3**, located in the Boiler Room, installed in 1980, exhausting through Stacks ~~44,~~ 17 and 20, respectively, rated at 8.38 million British thermal units per hour or 250 horsepower, each.
- (ei) One (1) natural gas-fired boiler, known as boiler #4, installed in 1987, located in the Boiler Room, exhausting through Stack 23, rated at 8.38 million British thermal units per hour or 250 horsepower.
- (fj) One (1) natural gas-fired boiler, known as boiler #5, located in #2 Fire Pump House, used to keep fire protection water from freezing, installed in 1980, exhausting through Stack 302, rated at 1.5 million British thermal units per hour.
- (gk) Four (4) natural gas-fired burners, known as flame breakout, consisting of two (2) burners

on Line 1 installed in 2000, one (1) burner on Line 8A installed in 1989, and one (1) burner on Line 8B installed in 1989, rated at 0.018 million British thermal units per hour, each.

- (hl) One (1) natural gas-fired preheat oven on Line 8A, exhausting through Stack 120, installed in July 2000, rated at 3.0 million British thermal units per hour.
- (im) One (1) natural gas-fired process water heater, known as WH-1, located in the Boiler Room installed in 2003, rated at 3.5 million British thermal units per hour.
- (jn) One (1) natural gas-fired forced air ventilation system for space heating, rated at 3.898 million British thermal units per hour, consisting of two (2) process space heaters, known as VS-N1 and VS-N2, located at Tempering docks, rated at 1.949 million British thermal units per hour each.
- (ko) One (1) diesel-fired emergency generator, known as EG1, located in the Boiler Room, installed in 1997, rated at 197 horsepower output, operating a maximum of 500 hours per year;
- (lp) Two (2) diesel-fired emergency pumps, known as EP-1 and EP-2, located in #1 Fire Pump House and #2 Fire Pump House, respectively, installed in 1980, rated at 215 horsepower output, each, and operating a maximum of 500 hours per year, each.
- (mq) Seven (7) parts Heritage Crystal Clean washers, known as Washers #1 through #7, installed in 2007, capacity: 15 gallons of nonhalogenated solvent for Line 1, Line 3, Line 8A, Line 8B, Maintenance Shop, Fork Truck Repair and Basement Maintenance.
- (nr) One (1) parts washer, known as Washer #11, installed in 1981, with a capacity of 100 gallons of nonhalogenated solvent, located in the Maintenance Shop.
- (es) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.
- (pt) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (qu) One (1) off-line soldering process with materials and capacities not indicated as confidentiality was requested, consisting of three (3) manual soldering stations, installed in 1997 and one (1) manual soldering station, installed in 1999, exhausted through Stack 77.
- (rv) One (1) interleaving process, identified as Line 6 interleaving process, installed in 1999, equipped with a baghouse located on the Rack Pad, exhausted through Stack 119 with materials and capacity not indicated as confidentiality was requested.
- (sw) Two (2) storage tanks, known as Tanks 1 and 2, installed in 1989, located in the Basement, capacity: 500 gallons of water treatment product(s), each.
- (tx) Three (3) storage tanks, known as Tanks 4, 5 and 6, located in the #1 Fire Pump House, #2 Fire Pump House and east of Boiler Room respectively, used to store fuel for emergency generator and pumps, installed in 1980, 1980 and 1997, capacity: 300 gallons of diesel fuel, each.
- (uy) One (1) storage tank, known as Tank 3, installed in 1987, capacity: 2,000 gallons of water treatment product located in the Boiler Room,
- (vz) Two (2) storage tanks, known as Tanks 7 and 9, installed in 1999, located at the North

and South Cooling Towers respectively, capacity: 400 gallons of water treatment product(s), each.

- (~~w~~aa) Two (2) storage tanks, known as Tanks 8 and 10, installed in 1992, located at the North and South Cooling Towers respectively, capacity: 400 gallons of water treatment product(s), each,
- (~~x~~bb) Sulfur dioxide roll surface preparation, identified as sulfur dioxide application, installed in 1985, using three (3) eighty (80) pound cylinders, with materials and capacities not indicated as confidentiality was requested.
- (~~y~~cc) Four (4) space heaters using natural gas-fired combustion sources with heat input equal to 200,000 British thermal units, constructed in 2003.
- (~~z~~dd) Application of vinyl enhancer to laminated product to improve product quality began operation in 2003. No construction required.
- (~~a~~eee) Adhesive application of press cloth material to Tempering glass presses began operation in 2003. No construction required.
- (~~b~~fff) Activities related to routine fabrication, maintenance and repair of buildings, structures, and equipment which utilize halogenated organic solvents began operation in 2005. No construction required.
- (~~e~~ggg) One (1) manual priming operation on Laminating Line 8 began operation in 2005 and has a potential to emit PM and PM10 at a rate less than five (5) tons per. No construction was required.
- (~~d~~hhh) One (1) on line soldering station on Laminating Line #8 began operation in 2008 and is not exhausted through a stack. The operation uses a portable exhaust unit.

...
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

- | |
|---|
| ... |
| (eg) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128. |
| (dh) Three Two (32) natural gas-fired boilers, known as boiler #12 through and #3 , located in the Boiler Room, installed in 1980, exhausting through Stacks 44, 17 and 20, respectively, rated at 8.38 million British thermal units per hour or 250 horsepower, each. |
| (ei) One (1) natural gas-fired boiler, known as boiler #4, located in the Boiler Room, installed in 1987, exhausting through Stack 23, rated at 8.38 million British thermal units per hour or 250 horsepower. |
| (fj) One (1) natural gas-fired boiler, known as boiler #5, located in #2 Fire Pump House, used to keep fire protection water from freezing, installed in 1980, exhausting through Stack 302, rated at 1.5 million British thermal units per hour. |
| (gk) Four (4) natural gas-fired burners, known as flame breakout, consisting of two (2) burners on Line 1 installed in 2000, one (1) burner on Line 8A installed in 1989, and one (1) burner on Line 8B installed in 1989, rated at 0.018 million British thermal units per hour, each. |
| (hl) One (1) natural gas-fired preheat oven on Line 8A, exhausting through Stack 120, installed in July 2000, rated at 3.0 million British thermal units per hour. |

- (im) One (1) natural gas-fired process water heater, known as WH-1, located in the Boiler Room installed in 2003, rated at 3.5 million British thermal units per hour.
- (jn) One (1) natural gas-fired forced air ventilation system for space heating, rated at 3.898 million British thermal units per hour, consisting of two (2) process space heaters, known as VS-N1 and VS-N2, located at Tempering docks, rated at 1.949 million British thermal units per hour each.
- (ko) One (1) diesel-fired emergency generator, known as EG1, located in the Boiler Room installed in 1997, rated at 197 horsepower output, operating a maximum of 500 hours per year;
- (lp) Two (2) diesel-fired emergency pumps, known as EP-1 and EP-2, located in #1 Fire Pump House and #2 Fire Pump House, respectively installed in 1980, rated at 215 horsepower output, each, and operating a maximum of 500 hours per year, each.

...
D.2.1 Particulate [326 IAC 6-2-3]

- (a) Pursuant to 326 IAC 6-2-3(e), the particulate emissions from each of the 8.38 million British thermal units per hour heat input boilers, known as boiler #1, #2 and #3 shall be limited to 0.6 pounds per million British thermal units heat input.

...
D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit is required for the boilers (1, 2, 3, 4, and 5).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

- ...
(mq) Seven (7) parts Heritage Crystal Clean washers, known as Washers #1 through #7, installed in 2007, capacity: 15 gallons of nonhalogenated solvent, for Line 1, Line 3, Line 8A, Line 8B, Maintenance Shop, Fork Truck Repair and Basement Maintenance.
- (nr) One (1) parts washer, known as Washer #11, installed in 1981, with a capacity of 100 gallons of nonhalogenated solvent located in the Maintenance Shop.
- (es) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.

...
SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

- ...
(pt) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (qu) One (1) off-line soldering process with materials and capacities not indicated as confidentiality was requested, consisting of three (3) manual soldering stations, installed in 1997 and one (1) manual soldering station, installed in 1999, exhausted through Stack 77.
- (rv) One (1) interleaving process, identified as Line 6 interleaving process, installed in 1999, equipped with a baghouse located on the Rack Pad exhausted through Stack 119 with materials and capacity not indicated as confidentiality was requested.
- (dhh) One (1) on line soldering station on Laminating Line #8 began operation in 2008 and is not exhausted through a stack. The operation uses a portable exhaust unit.
- ...

IDEM, OAQ has decided to make additional revisions to the permit as described below. The

IDEM, OAQ has decided to make additional revisions to the permit as described below. The permit has been revised as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

1. Several of IDEM's branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to "Permit Administration and Development Section" and the "Permits Branch" have been changed to "Permit Administration and Support Section". References to "Asbestos Section", "Compliance Data Section", "Air Compliance Section", and "Compliance Branch" have been changed to "Compliance and Enforcement Branch". The permit has been revised as follows:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit. A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Brian Williams, of my staff, at 317-234-5375 or 1-800-451-6027, and ask for extension 4-5375.

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and Appendix A

IC/BMW

cc: File - Vanderburgh County
Vanderburgh County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Pittsburgh Glass Works, LLC
(formerly PPG Industries, Inc.)
424 East Inglefield Road
Evansville, Indiana 47725**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

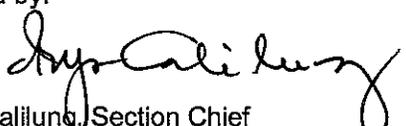
Operation Permit No.: M 163-23830-00094	
Issued by/Original Signed By: Alfred C. Dumauval, Ph. D., Section Chief Permit Administration and Support Section Office of Air Quality	Issuance Date: December 30, 2008 Expiration Date: December 30, 2018
First Notice-Only Change No.: 163-27777-00094	
Issued by:  Iryn Callilung, Section Chief Permit Administration and Support Section Office of Air Quality	Issuance Date: June 11, 2009 Expiration Date: December 30, 2018

TABLE OF CONTENTS

A. SOURCE SUMMARY	4
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
B. GENERAL CONDITIONS	8
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	13
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]	
C.1 Permit Revocation [326 IAC 2-1.1-9]	
C.2 Opacity [326 IAC 5-1]	
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5 Fugitive Dust Emissions [326 IAC 6-4]	
C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-6.1-5(a)(2)]	
C.7 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.8 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.9 Compliance Monitoring [326 IAC 2-1.1-11]	
C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.11 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.12 Response to Excursions or Exceedances	
C.13 Actions Related to Noncompliance Demonstrated by a Stack Test	

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

- C.14 Malfunctions Report [326 IAC 1-6-2]
- C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]
[IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 19

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.1.1 Particulate [326 IAC 6-3-2(c)]
- D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 20

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.2.1 Particulate [326 IAC 6-2-3]
- D.2.2 Particulate [326 IAC 6-2-4]
- D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

D.3. EMISSIONS UNIT OPERATION CONDITIONS..... 22

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

D.4. EMISSIONS UNIT OPERATION CONDITIONS..... 24

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.4.1 Particulate [326 IAC 6-3-2(c)]

MSOP Certification..... 25
Annual Notification 26
Malfunction Report 27

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary transportation transparency manufacturing source, including silk screening, tempering, laminating and other processes for automotive glass products.

Source Address:	424 East Inglefield Road, Evansville, Indiana 47725
Mailing Address:	424 East Inglefield Road, Evansville, IN 47725
General Source Phone Number:	812-868-8206
SIC Code:	3231
County Location:	Vanderburgh
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) silk screening operation, exhausted through Stacks 45, 55 and 56 (laminating) and Stacks 69, 70, 74 and 75 (tempering) with materials and capacities not indicated as confidentiality was requested, except for the talc application machines, consisting of:
 - (1) One (1) laminating line, known as Line 1, installed in 1980, includes silk screening, exhausting through Stack 45, equipped with a talc application machine controlled by a particulate matter trap, exhausted through Stack 117, capacity: 0.0007 pounds of talc per unit, equipped with two (2) cutting and two (2) edge machines.
 - (2) One (1) tempering line, known as Line 3 cold end process, installed in 1983, feeds glass directly to the Line 3, equipped with one (1) cutting and two (2) edge machines.
 - (3) One (1) tempering line, known as Line 3 (hot end only), installed in 1983, includes silk screening, and exhausted through stack 4.
 - (4) One (1) tempering line, known as Line 4 (cold end and hot end, but no silk screening), installed in 1980, equipped with one (1) cutting and two (2) edge machines.
 - (5) One (1) tempering line, known as Line 5 (hot end only), includes silk screening of both silk screen frit and conductive coatings, installed in 1987, exhausting through Stacks 69 and 70.

- (6) One (1) cold-end process to the existing tempering line #5, identified as Line 5 Cold End, equipped with two (2) dust collectors, installed in 2002, exhausting through Stacks 501 and 502.
- (7) One (1) tempering line, known as Line 6, includes silk screening of both silk screen frit and conductive coatings, installed in 1987, equipped with two (2) cutting and two (2) edge machines, exhausting through Stacks 74 and 75.
- (8) One (1) laminating line, known as Line 8A, includes silk screening of both silk screen frit and conductive coatings, installed in 1989, exhausted through Stack 55, equipped with a talc application machine controlled by fabric filters, exhausting through Stack 49, capacity: 0.003 pounds of talc per unit, equipped with one (1) cutting and one (1) edge machine.
- (9) One (1) laminating line, known as Line 8B, includes silk screening of both silk screen frit and conductive coatings, installed in 1989, exhausted through Stack 56, equipped with a talc application machine controlled by fabric filters, exhausting through Stack 50, capacity: 0.003 pounds of talc per unit, equipped with one (1) cutting and one (1) edge machine.
- (b) One (1) prime and assembly line, installed in July 2001, with materials and capacities not indicated as confidentiality was requested, consisting of a primer application, equipped with a felt tip applicator, exhausting through Stack 300 and primer curing station, exhausting through Stack 301, a clip assembly machine and two (2) rubber dam soldering stations.
- (c) One (1) prime and assembly line, identified as Prime and Assembly Line #1, approved for construction in 2009, with a maximum capacity of 50 parts per hour, consisting of a foam tip primer applicator and one (1) soldering station, and exhausting through Stack 303.
- (d) One (1) prime and assembly line, identified as Prime and Assembly Line #2, approved for construction in 2009, with a maximum capacity of 300 parts per hour, consisting of a foam tip primer applicator, and exhausting through Stack 303.
- (e) One (1) prime and assembly line, identified as Prime and Assembly Line #3, approved for construction in 2009, with a maximum capacity of 60 parts per hour, consisting of a foam tip primer applicator and one (1) soldering station, and exhausting through Stack 303.
- (f) One (1) clip priming machine, identified as Clip Priming Machine, approved for construction in 2009, with a maximum capacity of 600 parts per hour, consisting of a dip primer applicator, and exhausting through Stack 303.
- (g) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
- (h) Two (2) natural gas-fired boilers, known as boiler #2 and #3, located in the Boiler Room, installed in 1980, exhausting through Stacks 14, 17 and 20, respectively, rated at 8.38 million British thermal units per hour or 250 horsepower, each.
- (i) One (1) natural gas-fired boiler, known as boiler #4, installed in 1987, located in the Boiler Room, exhausting through Stack 23, rated at 8.38 million British thermal units per hour or 250 horsepower.
- (j) One (1) natural gas-fired boiler, known as boiler #5, located in #2 Fire Pump House, used to keep fire protection water from freezing, installed in 1980, exhausting through Stack 302, rated at 1.5 million British thermal units per hour.

- (k) Four (4) natural gas-fired burners, known as flame breakout, consisting of two (2) burners on Line 1 installed in 2000, one (1) burner on Line 8A installed in 1989, and one (1) burner on Line 8B installed in 1989, rated at 0.018 million British thermal units per hour, each.
- (l) One (1) natural gas-fired preheat oven on Line 8A, exhausting through Stack 120, installed in July 2000, rated at 3.0 million British thermal units per hour.
- (m) One (1) natural gas-fired process water heater, known as WH-1, located in the Boiler Room installed in 2003, rated at 3.5 million British thermal units per hour.
- (n) One (1) natural gas-fired forced air ventilation system for space heating, rated at 3.898 million British thermal units per hour, consisting of two (2) process space heaters, known as VS-N1 and VS-N2, located at Tempering docks, rated at 1.949 million British thermal units per hour each.
- (o) One (1) diesel-fired emergency generator, known as EG1, located in the Boiler Room, installed in 1997, rated at 197 horsepower output, operating a maximum of 500 hours per year;
- (p) Two (2) diesel-fired emergency pumps, known as EP-1 and EP-2, located in #1 Fire Pump House and #2 Fire Pump House, respectively, installed in 1980, rated at 215 horsepower output, each, and operating a maximum of 500 hours per year, each.
- (q) Seven (7) parts Heritage Crystal Clean washers, known as Washers #1 through #7, installed in 2007, capacity: 15 gallons of nonhalogenated solvent for Line 1, Line 3, Line 8A, Line 8B, Maintenance Shop, Fork Truck Repair and Basement Maintenance.
- (r) One (1) parts washer, known as Washer #11, installed in 1981, with a capacity of 100 gallons of nonhalogenated solvent, located in the Maintenance Shop.
- (s) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.
- (t) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (u) One (1) off-line soldering process with materials and capacities not indicated as confidentiality was requested, consisting of three (3) manual soldering stations, installed in 1997 and one (1) manual soldering station, installed in 1999, exhausted through Stack 77.
- (v) One (1) interleaving process, identified as Line 6 interleaving process, installed in 1999, equipped with a baghouse located on the Rack Pad, exhausted through Stack 119 with materials and capacity not indicated as confidentiality was requested.
- (w) Two (2) storage tanks, known as Tanks 1 and 2, installed in 1989, located in the Basement, capacity: 500 gallons of water treatment product(s), each.
- (x) Three (3) storage tanks, known as Tanks 4, 5 and 6, located in the #1 Fire Pump House, #2 Fire Pump House and east of Boiler Room respectively, used to store fuel for emergency generator and pumps, installed in 1980, 1980 and 1997, capacity: 300 gallons of diesel fuel, each.

- (y) One (1) storage tank, known as Tank 3, installed in 1987, capacity: 2,000 gallons of water treatment product located in the Boiler Room,
- (z) Two (2) storage tanks, known as Tanks 7 and 9, installed in 1999, located at the North and South Cooling Towers respectively, capacity: 400 gallons of water treatment product(s), each.
- (aa) Two (2) storage tanks, known as Tanks 8 and 10, installed in 1992, located at the North and South Cooling Towers respectively, capacity: 400 gallons of water treatment product(s), each,
- (bb) Sulfur dioxide roll surface preparation, identified as sulfur dioxide application, installed in 1985, using three (3) eighty (80) pound cylinders, with materials and capacities not indicated as confidentiality was requested.
- (cc) Four (4) space heaters using natural gas-fired combustion sources with heat input equal to 200,000 British thermal units, constructed in 2003.
- (dd) Application of vinyl enhancer to laminated product to improve product quality began operation in 2003. No construction required.
- (ee) Adhesive application of press cloth material to Tempering glass presses began operation in 2003. No construction required.
- (ff) Activities related to routine fabrication, maintenance and repair of buildings, structures, and equipment which utilize halogenated organic solvents began operation in 2005. No construction required.
- (gg) One (1) manual priming operation on Laminating Line 8 began operation in 2005 and has a potential to emit PM and PM10 at a rate less than five (5) tons per. No construction was required.
- (hh) One (1) on line soldering station on Laminating Line #8 began operation in 2008 and is not exhausted through a stack. The operation uses a portable exhaust unit.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M 163-23830-00094, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M 163-23830-00094 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.16 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee. When do I call? After the permit has been issued?

B.19 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:

- (1) monitoring data;
- (2) monitor performance data, if applicable; and
- (3) corrective actions taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present

or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Silk Screening Operations

- (a) One (1) silk screening operation, exhausted through Stacks 45, 55 and 56 (laminating) and Stacks 69, 70, 74 and 75 (tempering) with materials and capacities not indicated as confidentiality was requested, except for the talc application machines, consisting of:
- (1) One (1) laminating line, known as Line 1, installed in 1980, includes silk screening, exhausting through Stack 45, equipped with a talc application machine controlled by a particulate matter trap, exhausted through Stack 117, capacity: 0.0007 pounds of talc per unit, equipped with two (2) cutting and two (2) edge machines.
 - (8) One (1) laminating line, known as Line 8A, includes silk screening of both silk screen frit and conductive coatings, installed in 1989, exhausted through Stack 55, equipped with a talc application machine controlled by fabric filters, exhausting through Stack 49, capacity: 0.003 pounds of talc per unit, equipped with one (1) cutting and one (1) edge machine.
 - (9) One (1) laminating line, known as Line 8B, includes silk screening of both silk screen frit and conductive coatings, installed in 1989, exhausted through Stack 56, equipped with a talc application machine controlled by fabric filters, exhausting through Stack 50, capacity: 0.003 pounds of talc per unit, equipped with one (1) cutting and one (1) edge machine.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2(c)] [326 IAC 6-5]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the talc application machines on Lines 1, 8A and 8B shall not exceed 6.48, 4.21 and 4.21 pounds per hour, respectively. These pound per hour limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour which has been requested to be confidential.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit is required for the facilities listed above and their control devices.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Ovens and Combustion Facilities

- (g) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
- (h) Two (2) natural gas-fired boilers, known as boiler #2 and #3, located in the Boiler Room, installed in 1980, exhausting through Stacks 14, 17 and 20, respectively, rated at 8.38 million British thermal units per hour or 250 horsepower, each.
- (i) One (1) natural gas-fired boiler, known as boiler #4, located in the Boiler Room, installed in 1987, exhausting through Stack 23, rated at 8.38 million British thermal units per hour or 250 horsepower.
- (j) One (1) natural gas-fired boiler, known as boiler #5, located in #2 Fire Pump House, used to keep fire protection water from freezing, installed in 1980, exhausting through Stack 302, rated at 1.5 million British thermal units per hour.
- (k) Four (4) natural gas-fired burners, known as flame breakout, consisting of two (2) burners on Line 1 installed in 2000, one (1) burner on Line 8A installed in 1989, and one (1) burner on Line 8B installed in 1989, rated at 0.018 million British thermal units per hour, each.
- (l) One (1) natural gas-fired preheat oven on Line 8A, exhausting through Stack 120, installed in July 2000, rated at 3.0 million British thermal units per hour.
- (m) One (1) natural gas-fired process water heater, known as WH-1, located in the Boiler Room installed in 2003, rated at 3.5 million British thermal units per hour.
- (n) One (1) natural gas-fired forced air ventilation system for space heating, rated at 3.898 million British thermal units per hour, consisting of two (2) process space heaters, known as VS-N1 and VS-N2, located at Tempering docks, rated at 1.949 million British thermal units per hour each.
- (o) One (1) diesel-fired emergency generator, known as EG1, located in the Boiler Room installed in 1997, rated at 197 horsepower output, operating a maximum of 500 hours per year;
- (p) Two (2) diesel-fired emergency pumps, known as EP-1 and EP-2, located in #1 Fire Pump House and #2 Fire Pump House, respectively installed in 1980, rated at 215 horsepower output, each, and operating a maximum of 500 hours per year, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate [326 IAC 6-2-3]

- (a) Pursuant to 326 IAC 6-2-3(e), the particulate emissions from each of the 8.38 million British thermal units per hour heat input boilers, known as boiler #2 and #3 shall be limited to 0.6 pounds per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6-2-3, the particulate emissions from the 1.5 million British thermal units per hour heat input boiler, known as boiler #5 shall be limited to 0.528 pounds per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = \frac{C * a * h}{76.5 * Q^{0.75} * N^{0.25}} \quad Pt = \text{lbs of particulate emitted per MMBtu heat input}$$

where:

C = maximum ground level concentration (default = 50 u/m³)
a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)
h = stack height in feet
Q = total source maximum operating capacity
N = number of stacks in fuel burning operation

D.2.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the 8.38 million British thermal units per hour heat input boiler, known as boiler #4 shall be limited to 0.432 pounds per million British thermal units heat input.

$$Pt = \frac{1.09}{Q^{0.26}}$$

where:

Pt = Pounds of particulate emitted per million British thermal units.

Q = Total source maximum operating capacity rating in million British thermal units heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit is required for the boilers (2, 3, 4, and 5).

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Parts Washers

- (q) Seven (7) parts Heritage Crystal Clean washers, known as Washers #1 through #7, installed in 2007, capacity: 15 gallons of nonhalogenated solvent, for Line 1, Line 3, Line 8A, Line 8B, Maintenance Shop, Fork Truck Repair and Basement Maintenance.
- (r) One (1) parts washer, known as Washer #11, installed in 1981, with a capacity of 100 gallons of nonhalogenated solvent located in the Maintenance Shop.
- (s) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980 (Washer # 11), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5(a) and (b)]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990 (Washers # 1 through # 7, Washer for Fork Truck and Maintenance machine, and Washer for Lines 5 and 6), shall ensure that the following requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or

- (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990 (Washers # 1 through # 7, Washer for Fork Truck and Maintenance machine, and Washer for Lines 5 and 6), shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.4

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Deposition, Soldering and Interleaving Processes

- (t) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (u) One (1) off-line soldering process with materials and capacities not indicated as confidentiality was requested, consisting of three (3) manual soldering stations, installed in 1997 and one (1) manual soldering station, installed in 1999, exhausted through Stack 77.
- (v) One (1) interleaving process, identified as Line 6 interleaving process, installed in 1999, equipped with a baghouse located on the Rack Pad exhausted through Stack 119 with materials and capacity not indicated as confidentiality was requested.
- (hh) One (1) on line soldering station on Laminating Line #8 began operation in 2008 and is not exhausted through a stack. The operation uses a portable exhaust unit.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.4.1 Particulate [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the interleaving process shall not exceed 6.08 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the offline soldering process shall not exceed 7.76 pounds per hour.
- (c) The pound per hour limitations were calculated with the following equation

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION**

Source Name: Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.)
Source Address: 424 East Inglesfield Road, Evansville, Indiana 47725
Mailing Address: 424 East Inglesfield Road, Evansville, IN 47725
MSOP No.: M 163-23830-00094

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)_____
- Report (specify)_____
- Notification (specify)_____
- Affidavit (specify)_____
- Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.)
Address:	424 East Inglefield Road
City:	Evansville, Indiana 47725
Phone #:	812-868-8206
MSOP #:	M 163-23830-00094

I hereby certify that Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.) is :

still in operation.

no longer in operation.

I hereby certify that Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.) is :

in compliance with the requirements of MSOP M 163-23830-00094.

not in compliance with the requirements of MSOP M 163-23830-00094.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER: (317) 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100 TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Appendix A: Emissions Calculations
VOC and Particulate
From Prime & Assembly Line #1**

**Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglesfield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams**

VOC Emissions: 2009 Toyota Sienna Part - Back Lite (Toy 4306)

Material	Description	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/part)	Maximum (part/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Potential Particulate (ton/yr)	Transfer Efficiency
Betaseal 43518	Clear Glass Primer (Brush)	6.97	99.54%	0.0%	99.5%	0.0%	0.00%	0.00013	50.0	6.94	6.94	0.04	1.05	0.19	0.00	100%

State Potential Emissions **Add worst case coating to all solvents** **0.04 1.05 0.19 0.00**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (parts/hour) * (gal/part) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

VOC Emissions (Soldering): 2009 Toyota Sienna Part - Back Lite (Toy 4306)

Material	Usage (lb/part)	Weight % VOC	Maximum (part/hr)	Potential VOC (lb/hr)	Potential VOC (ton/yr)
Antaya Solder/Flux	0.0009	1.00%	50	0.0004	0.0019

Methodology

Potential VOC Pounds per Hour = Usage (lb/part) * Weight % VOC * Maximum (parts/hr)
Potential VOC Tons per Year = Usage (lb/part) * Weight % VOC * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

HAPs Emissions: 2009 Toyota Sienna Part - Back Lite (Toy 4306)

Material	Description	Density (Lb/Gal)	Gal of Mat. (gal/part)	Maximum (part/hour)	Weight % Methanol	Weight % Toluene	Potential Methanol Emissions (ton/yr)	Potential Toluene Emissions (ton/yr)	Total HAPs Emissions (ton/yr)
Betaseal 43518	Clear Glass Primer	6.97	0.00013	50.0	49.77%	49.77%	0.10	0.10	0.19

METHODOLOGY

Potential HAPs Tons per Year = Density (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hour) * Weight % HAP * (8760 hrs/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
VOC, PM, and HAPs
From Prime & Assembly Line #2**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

VOC Emissions

Material	Description	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/part)	Maximum (part/hour)*	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Potential Particulate (ton/yr)	Transfer Efficiency
2009 Toyota Sienna - Front Door Side Lite Toy 4300/1																
Betaprime 5500	Black Glass Primer (Foam Tip Applicator)	7.92	62.48%	0.0%	62.5%	0.0%	0.00%	0.00017	300.0	4.95	4.95	0.25	5.95	1.09	0.00	100%
X2500A	Black Urethane (Brush)	10.59	0.76%	0.0%	0.8%	0.0%	0.00%	0.00078	300.0	0.08	0.08	0.02	0.45	0.08	0.00	100%
X2500B	Black Urethane (Brush)	10.09	2.18%	0.0%	2.2%	0.0%	0.00%	0.00082	300.0	0.22	0.22	0.05	1.30	0.24	0.00	100%
Isopropanol	Glass Prep (Hand-Wiped)	6.65	100.00%	0.0%	100.0%	0.0%	0.00%	0.00008	300.0	6.65	6.65	0.17	3.97	0.72	0.00	100%
Total												0.49	11.67	2.13		
2009 Toyota Sienna - Rear Door Slider Toy 4302/3																
Betaprime 5500	Black Glass Primer (Foam Tip Applicator)	7.92	62.48%	0.0%	62.5%	0.0%	0.00%	0.00017	300.0	4.95	4.95	0.25	5.95	1.09	0.00	100%
X2500A	Black Urethane (Brush)	10.59	0.76%	0.0%	0.8%	0.0%	0.00%	0.00062	300.0	0.08	0.08	0.01	0.36	0.07	0.00	100%
X2500B	Black Urethane (Brush)	10.09	2.18%	0.0%	2.2%	0.0%	0.00%	0.00066	300.0	0.22	0.22	0.04	1.04	0.19	0.00	100%
Isopropanol	Glass Prep (Hand-Wiped)	6.65	100.00%	0.0%	100.0%	0.0%	0.00%	0.00008	300.0	6.65	6.65	0.17	3.97	0.72	0.00	100%
Total												0.47	11.32	2.07		

Worst Case Potential Emissions**

0.49 11.67 2.13

METHODOLOGY

*Prime & Assembly Line #2 has a maximum capacity of 300 parts per hour (Front Doors + Rear Doors).
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (parts/hour) * (gal/part) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
** VOC emissions from front doors represent the worst case potential emissions.

HAPs Emissions

Material	Description	Density (Lb/Gal)	Gal of Mat. (gal/part)	Maximum (part/hour)*	Weight % MDI	Potential MDI Emissions (ton/yr)
2009 Toyota Sienna - Front Door Side Lite Toy 4300/1						
Betaprime 5500	Black Glass Primer	7.92	0.00017	300.0	1.00%	0.02
X2500A	Black Urethane	10.59	0.00078	300.0	1.00%	0.11
Total						0.13
2009 Toyota Sienna - Rear Door Slider Toy 4302/3						
Betaprime 5500	Black Glass Primer	7.92	0.00017	300.0	1.00%	0.02
X2500A	Black Urethane	10.59	0.00062	300.0	1.00%	0.09
Total						0.10

Worst Case Potential Emissions**

0.13

METHODOLOGY

*Prime & Assembly Line #2 has a maximum capacity of 300 parts per hour (Front Doors + Rear Doors).
Potential HAPs Tons per Year = Density (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hour) * Weight % HAP * (8760 hrs/yr) * (1 ton/2000 lbs)
** HAPs emissions from front doors represent the worst case potential emissions.
MDI = Methylene diphenyl diisocyanate

**Appendix A: Emissions Calculations
VOC, PM, and HAPs
From Prime & Assembly Line #3**

**Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglesfield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams**

VOC Emissions: 2009 Toyota Sienna - W/S Toy 4878

Material	Description	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/part)	Maximum (part/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Potential Particulate (ton/yr)	Transfer Efficiency
Betaprime 5500	Black Glass Primer (Foam Tip Applicator)	7.92	62.48%	0.0%	62.5%	0.0%	0.00%	0.00014	60.0	4.95	4.95	0.04	0.99	0.18	0.00	100%
Isopropanol	Glass Prep (Hand Wiped)	6.65	100.00%	0.0%	100.0%	0.0%	0.00%	0.00008	60.0	6.65	6.65	0.03	0.79	0.14	0.00	100%
Aron Mighty	Glass Primer (Foam Tip Applicator)	6.67	81.00%	0.0%	81.0%	0.0%	0.00%	0.00017	60.0	5.40	5.40	0.05	1.29	0.23	0.00	100%
DP-105	Clear Epoxy Adhesive (Part A)	9.59	0.00%	0.0%	0.0%	0.0%	0.00%	0.00011	60.0	0.00	0.00	0.00	0.00	0.00	0.00	100%
DP-105	Clear Epoxy Adhesive (Part B)	9.26	0.00%	0.0%	0.0%	0.0%	0.00%	0.00012	60.0	0.00	0.00	0.00	0.00	0.00	0.00	100%

State Potential Emissions

Add worst case coating to all solvents

0.13 3.07 0.56 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (parts/hour) * (gal/part) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

VOC Emissions (Soldering): 2009 Toyota Sienna - W/S Toy 4878

Material	Usage (lb/part)	Weight % VOC	Maximum (part/hr)	Potential VOC (lb/hr)	Potential VOC (ton/yr)
PC Systems Solder/Flux	0.0013	1.00%	60	0.0008	0.0034

Methodology

Potential VOC Pounds per Hour = Usage (lb/part) * Weight % VOC * Maximum (parts/hr)
Potential VOC Tons per Year = Usage (lb/part) * Weight % VOC * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

HAPs Emissions: 2009 Toyota Sienna - W/S Toy 4878

Material	Description	Density (Lb/Gal)	Gal of Mat. (gal/part)	Maximum (part/hour)	Weight % MDI	Weight % Methanol	Weight % MIBK	Potential MDI (ton/yr)	Potential Methanol (ton/yr)	Potential MIBK (ton/yr)	Total HAPs (ton/yr)
Betaprime 5500	Black Glass Primer	7.92	0.00014	60.0	1.00%	0.00%	0.00%	0.003	0.0	0.0	0.003
Aron Mighty	Glass Primer	6.67	0.00017	60.0	0.00%	5.00%	1.00%	0.00	0.014	0.003	0.017
Total								0.003	0.014	0.003	0.02

METHODOLOGY

Potential HAPs Tons per Year = Density (lb/gal) * Gal of Material (gal/part) * Maximum (part/hour) * Weight % HAP * (8760 hrs/yr) * (1 ton/2000 lbs)
MDI = Methylene diphenyl diisocyanate MIBK = Methyl isobutyl ketone

**Appendix A: Emissions Calculations
Particulate from Burnishing
From Prime & Assembly Lines #1 and #3**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

Emission Unit	Process	Maximum (part/hr)	Material Collected (lb/part)*	Potential PM/PM10/PM2.5 (lb/hr)	Potential PM/PM10/PM2.5 (ton/yr)
Prime & Assembly Line #1	Burnishing with Fiberglass Brush	50	5.51E-06	0.0003	0.0012
Prime & Assembly Line #3	Burnishing with Fiberglass Brush	60	5.51E-06	0.0003	0.0014

Methodology

*Amount of material collected per part provided by source.

Potential PM/PM10/PM2.5 (lb/hr) = Maximum (parts/hr) * Material Collected (lb/part)

Potential PM/PM10/PM2.5 (ton/yr) = Maximum (parts/hr) * Material Collected (lb/part) * 8760 (hrs/yr) * 1/2000 (ton/lbs)

**Appendix A: Emissions Calculations
VOC and Particulate
From Clip Priming**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

VOC Emissions: Clip Priming

Material	Description	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/part)	Maximum (part/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Potential Particulate (ton/yr)	Transfer Efficiency
Betaseal 43533	Black Body Primer (Dipped)	8.09	60.57%	0.0%	60.6%	0.0%	0.00%	0.00041	600.0	4.90	4.90	1.20	28.84	5.26	0.00	100%

State Potential Emissions

Add worst case coating to all solvents

1.20 28.84 5.26 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (parts/hour) * (gal/part) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

HAPs Emissions: Clip Priming

Material	Description	Density (Lb/Gal)	Gal of Mat. (gal/part)	Maximum (part/hour)	Weight % MDI	Potential MDI Emissions (ton/yr)
Betaseal 43533	Black Body Primer	8.09	0.00041	600.0	5.00%	0.43

METHODOLOGY

MDI = Methylene diphenyl diisocyanate
Potential HAPs Tons per Year = Density (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hour) * Weight % HAP * (8760 hrs/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
VOC and Particulate
From Glass Cleaning**

**Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglesfield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams**

Glass Cleaning

Material	Description	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/part)	Maximum (part/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Potential Particulate (ton/yr)	Transfer Efficiency
Glass Cleaner (Bulk)	Final Cleaning (Hand Wiped)	8.26	2.0%	0.0%	2.0%	0.0%	0.00%	0.00249	60.0	0.17	0.17	0.02	0.59	0.11	0.00	100%
Glass Cleaner (Bulk)	Final Cleaning (Hand Wiped)	8.26	2.0%	0.0%	2.0%	0.0%	0.00%	0.00083	300.0	0.17	0.17	0.04	0.98	0.18	0.00	100%
Glass Cleaner (Bulk)	Final Cleaning (Hand Wiped)	8.26	2.0%	0.0%	2.0%	0.0%	0.00%	0.00149	50.0	0.17	0.17	0.01	0.30	0.05	0.00	100%

State Potential Emissions

Add worst case coating to all solvents

0.08 1.87 0.34 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/part) * Maximum (parts/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (parts/hour) * (gal/part) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

**Appendix A: Emission Calculations
Natural Gas Combustion In Boilers**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Ingfield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

26.6

233.4

Pollutant

	PM*	PM10*	SO2	NO _x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.22	0.89	7.00E-02	11.67	0.64	9.80

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.450E-04	1.400E-04	8.751E-03	2.100E-01	3.967E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.834E-05	1.284E-04	1.634E-04	4.434E-05	2.450E-04

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations
Sulfur Dioxide Application**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

Process	SO ₂ Application Rate (lb/hr)*	Potential to Emit SO ₂ (tons/yr)
Line 3	0.106	0.46
Line 4	0.106	0.46
Line 5	0.106	0.46
Total		1.39

Methodology

*SO₂ application rate provided by source.

PTE SO₂ (tons/yr) = SO₂ application rate (lb/hr) * 8760 (hr/yr) * 1/2000 (ton/lbs)

**Appendix A: Emission Calculations
Potential to Emit of Modification**

Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams

Unlimited Potential to Emit of Modification (ton/yr)										
Emission Units	PM	PM10	PM2.5	SO ₂	NOx	VOC	CO	Total HAPs	Single HAP	
Prime & Assembly Line #1	0.0012	0.0012	0.0012	0.0	0.0	0.19	0.0	0.19	0.10	Methanol
Prime & Assembly Line #2	0.0	0.0	0.0	0.0	0.0	2.13	0.0	0.13	0.13	MDI
Prime & Assembly Line #3	0.0014	0.0014	0.0014	0.0	0.0	0.56	0.0	0.02	0.014	Methanol
Clip Priming	0.0	0.0	0.0	0.0	0.0	5.26	0.0	0.43	0.43	MDI
Glass Cleaning	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	
SO ₂ Application	0.0	0.0	0.0	1.39	0.0	0.00	0.0	0.0	0.0	
Total	0.003	0.003	0.003	0.0	0.0	8.49	0.0	0.77	0.56	MDI

MDI = Methylene diphenyl diisocyanate

**Appendix A: Emission Calculations
Emissions Summary**

**Company Name: Pittsburgh Glass Works, LLC
Address City IN Zip: 424 East Inglefield Road, Evansville, IN 47725
Permit Number: 163-27777-00094
Reviewer: Brian Williams**

Potential to Emit After Issuance (tons/yr)								
Emission Unit	PM	PM10	PM2.5	SO2	NOX	VOC	CO	HAP's
Boilers	0.22	0.89	0.89	0.07	11.67	0.64	9.80	0.22
Preheat Oven	0.04	0.16	0.16	7.90E-03	1.31	0.07	1.10	0.0
Space Heaters (2) & Process Water Heater	0.06	0.24	0.24	0.02	3.12	0.17	2.62	0.06
Silk Screening	0.0	0.0	0.0	0.0	0.0	62.00	0.0	0.0
Talc Application	4.56	4.56	4.56	0.0	0.0	0.0	0.0	0.0
SO ₂ Application	4.56	4.56	4.56	1.39	0.0	0.0	0.0	0.0
Cutting and Sanding	6.50	6.50	6.50	0.0	0.0	0.0	0.0	0.0
Generator and Pumps	0.35	0.35	0.35	0.32	4.85	0.38	1.05	0.59
Parts Washers	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0
Soldering	0.12	0.12	0.12	0.0	0.0	0.12	0.0	0.12
Interleaving Process	1.65	1.65	1.65	0.0	0.0	0	0.0	0.0
Fugitive Dust	1.30	1.30	1.30	0.0	0.0	0	0.0	0.0
Flame Breakout	3.80E-03	3.80E-03	3.80E-03	2.00E-04	1.35E-02	1.70E-03	2.65E-02	0.0
Prime and Assembly	0.13	0.13	0.13	0.0	0.0	1.15	0.0	0.0
IPA	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0
IPA/Silquest	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0
Unpaved Roads	7.41	1.58	1.58	0.0	0.0	0.0	0.0	0.0
Sulfur Dioxide Application	0.0	0.0	0.0	1.39	0.0	0.0	0.0	0.0
Prime & Assembly Line #1	0.0012	0.0012	0.0012	0.0	0.0	0.19	0.0	0.19
Prime & Assembly Line #2	0.0	0.0	0.0	0.0	0.0	2.13	0.0	0.13
Prime & Assembly Line #3	0.0014	0.0014	0.0014	0.0	0.0	0.56	0.0	0.02
Clip Priming	0.0	0.0	0.0	0.0	0.0	5.26	0.0	0.43
Glass Cleaning	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0
Total	26.90	22.04	22.04	3.20	20.96	74.76	14.60	1.76

0



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Christina Sallee
Pittsburgh Glass Works, LLC
424 E Inglefield Road
Evansville, IN 47725

DATE: June 11, 2009

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
MSOP
163-27777-00094

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Keith Holmes, Responsible Official
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 6/11/2009 Pittsburgh Glass Works, LLC 163-27777-00094 (Final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Christina Sallee Pittsburgh Glass Works, LLC 424 E Inglefield Rd Evansville IN 47725 (Source CAATS) (CONFIRM DELIVERY)										
2		Keith Holmes Plant Mgr Pittsburgh Glass Works, LLC 424 E Inglefield Rd Evansville IN 47725 (RO CAATS)										
3		Evansville City Council and Mayors Office 1NW MLK Blvd, Rm 302 Evansville IN 47708 (Local Official)										
4		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 (Local Official)										
5		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)										
6		Mr. Randy Brown Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)										
7		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)										
8		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 (Health Department)										
9		Kim Sherman 3355 Woodview Drive Newburgh IN 47630 (Affected Party)										
10		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
11		Evansville EPA 100 E. Walnut St. Suite 100, Newsome Center Evansville IN 47713 (Local Official)										
12		David Dempsey 201 N Illinois Street 16th Floor South Tower Indianapolis IN 46204 (Affected Party)										
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--