



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: December 30, 2008

RE: Pittsburgh Glass Works, LLC / 163-23830-00094

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

## Notice of Decision: Approval - Effective Immediately

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 IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require 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 of 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.dot12/03/07



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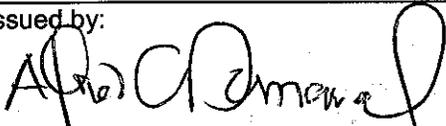
**Minor Source Operating Permit Renewal  
OFFICE OF AIR QUALITY**

**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:  Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 30, 2008  Expiration Date: December 30, 2018

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## 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)]

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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

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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) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
- (d) Three (3) natural gas-fired boilers, known as boiler #1 through #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.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.
- (j) 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.

- (k) 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;
- (l) 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.
- (m) 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.
- (n) 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.
- (o) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.
- (p) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (q) 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.
- (r) 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.
- (s) 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.
- (t) 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.
- (u) One (1) storage tank, known as Tank 3, installed in 1987, capacity: 2,000 gallons of water treatment product located in the Boiler Room,
- (v) 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) 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) 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) Four (4) space heaters using natural gas-fired combustion sources with heat input equal to 200,000 British thermal units, constructed in 2003.
- (z) Application of vinyl enhancer to laminated product to improve product quality began operation in 2003. No construction required.
- (aa) Adhesive application of press cloth material to Tempering glass presses began operation in 2003. No construction required.
- (bb) 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.
- (cc) 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.
- (dd) 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]

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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)]

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- (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]

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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

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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

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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

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

### B.7 Duty to Provide Information

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- (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

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- (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)]

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- (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 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]

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- (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]**

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- (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)]**

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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]**

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- (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  
Permits Branch, 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]**

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(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  
Permits Branch, 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**

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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]

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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]**

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(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  
Permits Branch, 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]**

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- (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]**

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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  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-52 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]**

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- (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 Data Section, 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]**

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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]**

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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]**

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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]**

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- (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**

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- (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**

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- (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]**

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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]**

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- (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 Data Section, 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

- (c) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
- (d) Three (3) natural gas-fired boilers, known as boiler #1 through #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.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.
- (j) 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.
- (k) 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;
- (l) 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 #1, #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/m<sup>3</sup>)  
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]

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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]

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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

#### **Emissions Unit Description:** Parts Washers

- (m) 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.
- (n) 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.
- (o) 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<sup>EC</sup>) (one hundred degrees Fahrenheit (100<sup>EF</sup>));
  - (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

- (p) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (q) 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.
- (r) 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.
- (dd) 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 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).

<b>Company Name:</b>	Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.)
<b>Address:</b>	424 East Inglefield Road
<b>City:</b>	Evansville, Indiana 47725
<b>Phone #:</b>	812-868-8206
<b>MSOP #:</b>	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.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

### 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:

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**Indiana Department of Environmental Management**  
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

**Source Background and Description**

Source Name:	Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.)
Source Location:	424 East Inglefield Road, Evansville, IN 47725
County:	Vanderburgh
SIC Code:	3231
Permit Renewal No.:	M163-23830-00094
Permit Reviewer:	Christine L. Filutze

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Pittsburgh Glass Works, LLC (formerly known as PPG Industries, Inc.) relating to the operation of a stationary transportation transparency manufacturing source, which includes silk screening, tempering, laminating and other processes for automotive glass products.

**History**

On October 30, 2006, PPG Industries, Inc. submitted an application to the OAQ requesting to renew its operating permit. PPG Industries, Inc. was issued a MSOP 163-13849-00094 on January 25, 2002.

On October 6, 2008, PPG Industries, Inc. notified IDEM that PPG Industries, Inc. was sold and their name was changed to Pittsburgh Glass Works, LLC and requested the air permit reflect this name change.

This Pittsburgh Glass Works, LLC has a postal address in Evansville, Indiana. Pittsburgh Glass Works, LLC is not located in the area under jurisdiction of the City of Evansville Environmental Protection Agency. This status has been confirmed by Dona Bergman, Director of the City of Evansville Environmental Protection Agency.

**Confidentiality**

Pittsburgh Glass Works, LLC has requested that the following portions of their application be kept confidential. These portions include the capacities of process facilities, materials used and throughputs as provided in the application on Forms E, F, W-1, W-2, W-3 and W-4. This request was approved by IDEM OAQ, originally for MSOP No. 163-13849-00094 which was issued on January 25, 2002.

**Permitted Emission Units and Pollution Control Equipment**

- (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) Two (2) electric ovens, identified as Line 8A Hot End and Line 8B Hot End, installed in 1989, exhausting through Stacks 121 - 128.
  - (d) Three (3) natural gas-fired boilers, known as boiler #1 through #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.
  - (e) 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.
  - (f) 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.

- (g) 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.
- (h) 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.
- (i) 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.
- (j) 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.
- (k) 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.
- (l) 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.
- (m) 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.
- (n) 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.
- (o) One (1) Heritage Crystal Clean parts washer, known as Washer for Lines 5 and 6, installed in 2007, with a capacity of 76 gallons.
- (p) One (1) magnetic sputtered vacuum deposition (MSVD) process (no emissions), identified as MSVD, installed in 1989, with capacity not indicated as confidentiality was requested.
- (q) 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.
- (r) 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.
- (s) 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.
- (t) 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.

- (u) One (1) storage tank, known as Tank 3, installed in 1987, capacity: 2,000 gallons of water treatment product located in the Boiler Room,
- (v) Two (2) storage tanks, known as Tanks 7 and 9, located at the North and South Cooling Towers respectively installed in 1999, capacity: 400 gallons of water treatment product(s), each.
- (w) Two (2) storage tanks, known as Tanks 8 and 10, located at the North and South Cooling Towers respectively installed in 1992, capacity: 400 gallons of water treatment product(s), each.
- (x) 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.

### **Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit**

The source also consists of the following emission units that were constructed and/or is operating without a permit:

- (a) Four (4) space heaters using natural gas-fired combustion sources with heat input equal to 200,000 British thermal units, constructed in 2003. Pursuant to 326 IAC 2-1.1-3(e)(5)(A)(i), the Permittee is exempt from the requirement to have a permit prior to constructing and/or operating a new source or modification of a combustion related activity that has a heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) Application of vinyl enhancer to laminated product to improve product quality began operation in 2003. No construction required. Pursuant to 326 IAC 2-1.1-3(e)(46)(A), the Permittee is exempt from the requirement to have a permit prior to constructing and/or operating equipment that emits VOCs and HAPs at amounts less than those defined under Section 112 (b) of the Clean Air Act.
- (c) Adhesive application of press cloth material to Tempering glass presses began operation in 2003. No construction required. Pursuant to 326 IAC 2-1.1-3(e)(46)(A), the Permittee is exempt from the requirement to have a permit prior to constructing and/or operating equipment that emits VOCs and HAPs at amounts less than those defined under Section 112 (b) of the Clean Air Act.
- (d) 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. Pursuant to 326 IAC 2-1.1-3(e)(34), the Permittee is exempt from the requirement to have a permit prior to constructing and/or operating routine fabrication, maintenance, and repair activities.
- (e) 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. Pursuant to 326 IAC 2-1.1-3(e)(1)(A), the Permittee is exempt from the requirement to have a permit prior to constructing and/or operating a new source or modification that has the potential to emit less than five (5) tons per year of either PM or PM10.
- (f) 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.

### **Emission Units and Pollution Control Equipment Removed From the Source**

- (a) One (1) tempering line (cold end only), known as Line 2, equipped with one (1) cutting and two (2) edging machines, installed in 1980.
- (b) One (1) tempering line, known as Line 3-2 (cold end only), installed in 1980, equipped with one (1) cutting and two (2) edge machines.
- (c) One (1) maintenance booth, equipped with dry filters for overspray control, with spray cans and/or air atomization spray applicators, exhausted through Stack 7, installed 1986.
- (d) Nine (9) parts washers, known as Washers #1 through #9, installed between 1985 and 2000, capacity: 30 gallons of nonhalogenated solvent, each. Replaced by seven (7) parts Heritage Crystal Clean washers, known as Washers #1 through #7, installed in 2007, capacity: 15 gallons of nonhalogenated solvent.
- (e) One (1) Safety-Kleen parts washer, installed in 2003, capacity: 77 gallons of nonhalogenated solvent. Replaced by one (1) Heritage Crystal Clean parts washer, installed in 2007, with a capacity of 76 gallons.

### **Existing Approvals**

Since the issuance of the MSOP 163-13849-00094 on January 25, 2002, the source has constructed or has been operating under the following approvals as well:

- (a) MSOP First Notice Only Change No. 163-15927-00094 issued on May 15, 2002;
- (b) MSOP Second Notice Only Change No. 163-16850-00094 issued on May 16, 2003; and
- (c) MSOP Third Notice Only Change No. 163-19264-00094 issued on June 16, 2004.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

### **Enforcement Issue**

There are no pending enforcement actions related to this source.

### **Emission Calculations**

- (a) See Appendix A of this document for a summary of the emission calculations. The details for the emissions calculations are in the state files but kept confidential per the source's request.
- (b) Using the Environmental Protection Agency's (EPA) TANKS Version 4.09d program, it was determined that use and storage (tanks # 1, 2, 3, 7, 8, 9, and 10) of water treatment product at this source would have negligible potential emissions of volatile organic compounds (VOCs) and volatile hazardous air pollutants (HAPs).

### **County Attainment Status**

The source is located in Vanderburgh County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective January 30, 2006, for the Evansville area, including Vanderburgh County, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Attainment effective October 18, 2000, for the 1-hour ozone standard for the Evansville area, including Vanderburgh County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has Designated Vanderburgh County as nonattainment for PM<sub>2.5</sub>. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM<sub>2.5</sub> promulgated on May 8<sup>th</sup>, 2008, and effective on July 15<sup>th</sup> 2008. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Vanderburgh County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (d) **Fugitive Emissions**  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

<b>Pollutant</b>	<b>tons/year</b>
PM	22.43
PM <sub>10</sub> <sup>(1)</sup>	18.43
PM <sub>2.5</sub>	18.43
SO <sub>2</sub>	0.44
VOC	66.46
CO	17.68
NO <sub>x</sub>	24.63
HAPs Total	0.77

- (1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

<b>Pollutant</b>	<b>Actual Emissions (tons/year)</b>
PM	0
PM <sub>10</sub>	0
PM <sub>2.5</sub>	0
SO <sub>2</sub>	0
VOC	20
CO	3
NO <sub>x</sub>	4
HAP	None Reported

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source based on the emissions summarized in this permit, MSOP 163-13849 is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons/year.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
  - (1) Each of the five (5) boilers are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc due to their rating being less than ten (10) million British thermal units per hour.
  - (2) None of the storage tanks are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110a or 110b, Subparts Ka or Kb, because none of the tanks installed after 1980 have capacities exceeding 40 m<sup>3</sup> (10,567 gallons).
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
  - (1) The eleven (11) parts washers are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T (40 CFR 63.460-469) since no halogenated HAP solvents are used.

### State Rule Applicability - Entire Source

#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than one hundred (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

#### 326 IAC 2-4.1-1 (New source toxics control)

The potential single and combination HAPs emissions from the entire source is less than ten (10) and twenty-five (25) tons per year. Specifically those facilities constructed after the July 27, 1997 applicability date of the rule can not produce finished product by themselves and therefore are not subject to the requirements of this rule.

### 326 IAC 2-6 (Emission Reporting)

This source is located in Vanderburgh County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

### 326 IAC 5-1 (Opacity Limitations)

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

### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

### 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is subject to the requirements of 326 IAC 6-5, because the source is located in Vanderburgh County. However, the fugitive dust sources (cutting, sanding and edging glass, broken glass and unpaved areas on property) do not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 is not applicable to Pittsburgh Glass Works, LLC.

## State Rule Applicability – Individual Facilities

### 326 IAC 6-2-3 (Particulate emission limitations for sources of indirect heating)

Pursuant to 326 IAC 6-2-3 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from the four (4) natural gas-fired boilers, #1, #2, #3 and #5, constructed in 1980 were in existence before September 21, 1983, and thus shall be limited by the following equation:

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

- C = maximum ground level concentration (default = 50  $\mu\text{g}/\text{m}^3$ )
- a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)
- h = stack height in feet (41.3 for #1, #2 and #3) and (20.0 for #5)
- Q = total source maximum operating capacity (26.64 MMBtu/hr)
- N = number of stacks in fuel burning operation (4)

For Boilers #1, #2 and #3

$$Pt = \frac{50 \text{ u/m}^3 * 0.67 * 41.3}{76.5 * 26.64^{0.75} * 4^{0.25}} = 1.09 \text{ pounds of particulate matter emitted per MMBtu heat input}$$

Pursuant to 326 IAC 6-2-3 (e), particulate emissions from all facilities used for indirect heating purposes which began operations after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input.

For Boiler #5

$$Pt = \frac{50 \text{ u/m}^3 * 0.67 * 20.0}{76.5 * 26.64^{0.75} * 4^{0.25}} = 0.528 \text{ pounds of particulate matter emitted per MMBtu heat input}$$

As derived from the spreadsheet for the boiler combustion, the PM emissions from the boilers are 0.218 tons per year for the 26.64 million British thermal units per hour. This is equivalent to 0.050 pounds per hour of particulate matter per 26.64 million British thermal units heat input or 0.0019 pounds per million British thermal unit. Therefore, the boilers comply with this rule.

### 326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d))

The boiler #4 installed in 1987, rated at 8.38 million British thermal units per hour, installed after September 21, 1983, is subject to the requirements of this rule that limits PM emissions as follows:

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

Where:

Pt = Pounds of particulate matter 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. (35.02 MMBtu/hr)

$$Pt = \frac{1.09}{35.02^{0.26}} = 0.432 \text{ pounds per million British thermal units.}$$

As derived from the spreadsheet for the boiler combustion, the PM emissions from this boiler is 0.068 tons per year for the 8.38 million British thermal units per hour. This is equivalent to 0.0156 pounds per hour of particulate matter per 8.38 million British thermal units heat input or 0.0019 pounds per million British thermal unit. Therefore, this boiler complies with this rule.

### 326 IAC 6-3-2 (Process Operations)

(a) Interleaving Processes

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the interleaving processes shall not exceed 6.08 pounds per hour.

This allowable PM emission rate was calculated by the following:

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.

As shown in the emission calculation section of this document, the potential PM emission rate before controls for the interleaving process is 0.376 pounds per hour. Therefore since the PM emission rate before controls of 0.376 pounds per hour is less than the allowable PM emission rate of 6.08 pounds per hour, the interleaving process complies with the rule and the control equipment does not have to be operated in order to comply with 326 IAC 6-3-2.

(b) Offline Soldering

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the offline soldering process shall not exceed 7.76 pounds per hour.

This allowable PM emission rate was calculated by the following:

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.

As shown in the emission calculation section of this document, the potential PM emission rate for the offline soldering process is 0.025 pounds per hour. Therefore since the PM emission rate of 0.025 pounds per hour is less than the allowable PM emission rate of 7.76 pounds per hour, the offline soldering process complies with 326 IAC 6-3-2.

(c) Talc Application Machines

- (1) Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the talc machine on Line 1 shall not exceed 6.48 pounds per hour.
- (2) Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from each of the talc machines on Lines 8A and 8b each shall not exceed 4.21 pounds per hour.

These allowable PM emission rates were calculated by the following:

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.

None of the facilities at this source have the potential to emit SO<sub>2</sub> at the rates of twenty-five (25) tons per year or ten (10) pounds per hour, or greater. Therefore pursuant to 326 IAC 7-1.1-1 this rule is not applicable to any of the facilities at this source.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

None of the facilities at this source have the potential to emit twenty-five (25) or more tons of VOC per year. Therefore, 326 IAC 8-1-6 is not applicable.

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)

This facility is not an automotive or light duty truck assembly plant and does not cure prime and topcoat coatings on automobile and light duty truck bodies, hoods, fenders, cargo boxes, doors or grill opening panels. Therefore, 326 IAC 8-2-2 is not applicable.

326 IAC 8-3-2 (Cold Cleaner Operations)

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.

326 IAC 8-3-5(a) and (b) (Cold Cleaner Degreaser Operation and Control)

- (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 (38EC) (one hundred degrees Fahrenheit (100EF));
    - (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.

#### 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.

#### Recommendation

The staff recommends to the Commissioner that the MSOP Renewal No. 163-23830-00094 be approved. This recommendation is based on the following facts and conditions.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 30, 2006. Additional information was received on February 20, 2006; January 21, 2008; April 17, 2008; May 12, 2008; July 29, 2008; and August 21, 2008.

## **Conclusion**

The operation of this stationary transportation transparency manufacturing source, which includes silk screening, tempering, laminating and other processes, shall be subject to the conditions of the attached MSOP Renewal No. 163-23830-00094.

**Appendix A: Emission Calculations  
Emissions Summary**

**Company Name:** Pittsburgh Glass Works, LLC (formerly PPG Industries, Inc.)  
**Address:** 424 East Inglefield Road, Evansville, IN 47725  
**MSOP:** M 163-23830-00094  
**Reviewer:** Christine L. Filutze  
**Date:** November 19, 2008

<b>Emission Calculation Summary</b>								
<b>PPG Emission Units</b>	<b>Potential Emissions (TPY)</b>							
	<b>PM</b>	<b>PM10</b>	<b>PM2.5</b>	<b>VOC</b>	<b>NOX</b>	<b>CO</b>	<b>SO2</b>	<b>HAP's</b>
Boilers	0.31	1.84	1.84	0.84	15.34	12.88	0.09	
Preheat Oven	0.04	0.16	0.16	0.07	1.31	1.10	7.90E-03	
Space Heaters (2) & Process Water Heater	0.06	0.24	0.24	0.17	3.12	2.62	0.02	0.06
Silk Screening				62.00				
Talc Application	4.56	4.56	4.56					
Cutting and Sanding	6.50	6.50	6.50					
Generator and Pumps	0.35	0.35	0.35	0.38	4.85	1.05	0.32	0.59
Parts Washers				0.42				
Soldering	0.12	0.12	0.12	0.12				0.12
Interleaving Process	1.65	1.65	1.65					
Fugitive Dust	1.30	1.30	1.30					
Flame Breakout	3.80E-03	3.80E-03	3.80E-03	1.70E-03	1.35E-02	2.65E-02	2.00E-04	
Prime and Assembly	0.13	0.13	0.13	1.15				
IPA				1.00				
IPA/Silquest				0.31				
Unpaved Roads	7.41	1.58	1.58					
<b>SOURCE TOTAL (TONS)</b>	<b>22.43</b>	<b>18.43</b>	<b>18.43</b>	<b>66.46</b>	<b>24.63</b>	<b>17.68</b>	<b>0.44</b>	<b>0.77</b>