



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 18, 2009

RE: Printing Partners / 097 - 25097 - 00622

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 OFFICE OF AIR QUALITY

**Printing Partners, Inc.
929 W. 16th Street
Indianapolis, Indiana 46202**

(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.: M097-25097-00622	
Issued by:  Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 18, 2009 Expiration Date: May 18, 2014

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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)]

The Permittee owns and operates an existing stationary commercial printing operation.

Source Address:	929 W. 16th Street, Indianapolis, Indiana 46202
Mailing Address:	929 W. 16th Street, Indianapolis, Indiana 46202
General Source Phone Number:	(317) 635-2282
SIC Code:	2752
County Location:	Marion
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) Kodak Nuvera 120 Digital Printer, identified as EU-1, maximum line speed 120 ft/min and maximum print width 18 inches, installed on January 16, 2007, vented to stack #2.
- (b) One (1) Kodak Nuvera 120 Digital Printer, identified as EU-2, maximum line speed 120 ft/min and maximum print width 18 inches, installed on January 19, 2007, vented to stack #2.
- (c) One (1) Digimaster Digital Printer, identified as EU-3, maximum line speed 150 ft/min and maximum print width 18 inches, installed on June 29, 2006, vented to stack #2.
- (d) One (1) NexPress 2100 Plus Printer, identified as EU-4, maximum line speed 53 ft/min and maximum print width 18 inches, installed on March 1, 2006, vented to stack #1.
- (e) One (1) Kodak Plate Processor, identified as EU-5, maximum line speed 2 ft/min and maximum print width 40 inches, installed on July 1, 2002, vented to stack #3.
- (f) One (1) Video Jet #1 Ink Jet Printer, identified as EU-6, maximum line speed 472 ft/min and maximum print width 12 inches, installed on January 2, 2007, vented to stack #8.
- (g) One (1) Video Jet #2 Ink Jet Printer, identified as EU-7, maximum line speed 472 ft/min and maximum print width 12 inches, installed on February 2, 2007, vented to stack #8.
- (h) One (1) Heidelberg MO5P color press with coater, identified as EU-8, maximum line speed 381 ft/min and maximum print width 25 inches, installed on January 1, 2006, vented to stack #4.
- (i) One (1) Heidelberg MO5 color press with coater, identified as EU-9, maximum line speed 381 ft/min and maximum print width 25 inches, installed on June 1, 2000, vented to stack #5.

- (j) One (1) Heidelberg MO4 color press with coater, identified as EU-10, maximum line speed 381 ft/min and maximum print width 25 inches, installed on March 1, 2006, vented to stack #6.
- (k) One (1) Heidelberg SM40 color press with coater, identified as EU-11, maximum line speed 833 ft/min and maximum print width 40 inches, installed on February 7, 2006, vented to stack #7.
- (l) One (1) Heidelberg QM46 two (2) color press, identified as EU-12, maximum line speed 250 ft/min and maximum print width 12 inches, installed on April 1, 2004, vented to stack #8 General.
- (m) One (1) Heidelberg QM46 two (2) color press, identified as EU-13, maximum line speed 250 ft/min and maximum print width 12 inches, installed on April 1, 2004, vented to stack #8 General.
- (n) One (1) Ryobi 3202M two (2) color press, identified as EU-14, maximum line speed 250 ft/min and maximum print width 12 inches, installed on August 31, 2000, vented to stack #8 General.
- (o) One (1) Ryobi 975M two (2) color press, identified as EU-15, maximum line speed 200 ft/min and maximum print width 12 inches, installed on November 13, 2001, vented to stack #8 General.
- (p) One (1) Ryobi 3985 two (2) color press, identified as EU-16, maximum line speed 200 ft/min and maximum print width 12 inches, installed on March 5, 2002, vented to stack #8 General.
- (q) One (1) Ryobi 3200MCD two (2) color press, identified as EU-17, maximum line speed 200 ft/min and maximum print width 12 inches, installed on March 24, 2003, vented to stack #8 General.
- (r) One (1) Ryobi 3200CD two (2) color press, identified as EU-18, maximum line speed 200 ft/min and maximum print width 12 inches, installed on April 16, 2003, vented to stack #8 General.
- (s) One (1) Heidelberg MO4 two (2) color press, identified as EU-19, maximum line speed 381 ft/min and maximum print width 25 inches, installed on August 31, 2000, vented to stack #8 General.
- (t) One (1) Heidelberg WM Die Cutter, identified as EU-20, maximum throughput of 8.1345 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (u) One (1) Heidelberg WM Die Cutter, identified as EU-21, maximum throughput of 8.1345 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (v) One (1) Heidelberg WM Die Cutter, identified as EU-22, maximum throughput of 8.1345 lb/hr, installed on December 10, 2001, vented to stack #8 General.
- (w) One (1) Heidelberg WM Die Cutter, identified as EU-23, maximum throughput of 8.1345 lb/hr, installed on November 24, 2001, vented to stack #8 General.
- (x) One (1) Heidelberg WM S28 Die Cutter, identified as EU-24, maximum throughput of 29.4058 lb/hr, installed on May 21, 2002, vented to stack #8 General.
- (y) One (1) Polar Paper Cutter, identified as EU-25, maximum throughput of 265 lb/hr, installed on October 12, 2004, vented to stack #8 General.
- (z) One (1) Perfecta Paper Cutter, identified as EU-26, maximum throughput of 265 lb/hr, installed on December 19, 2005, vented to stack #8 General.
- (aa) One (1) Perfecta Paper Cutter, identified as EU-27, maximum throughput of 265 lb/hr, installed on December 19, 2005, vented to stack #8 General.
- (bb) One (1) Stahl FT49 Paper Folder, identified as EU-28, maximum throughput of 62.64 lb/hr, installed on August 31, 2000, vented to stack #8 General.

- (cc) One (1) Stahl FT47 Paper Folder, identified as EU-29, maximum throughput of 62.64 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (dd) One (1) Stahl 56 Paper Folder with glue, identified as EU-30, maximum throughput of 62.64 lb/hr, installed on June 14, 2006, vented to stack #8 General.
- (ee) One (1) Stahl 66 Paper Folder with glue, identified as EU-31, maximum throughput of 62.64 lb/hr, installed on July 15, 2006, vented to stack #8 General.
- (ff) One (1) Stahl 1424B Paper Folder, identified as EU-32, maximum throughput of 62.64 lb/hr, installed on September 11, 2002, vented to stack #8 General.
- (gg) Ten (5) natural gas-fired roof top heaters, identified as #1 - 4 and #6-11, rated at 0.191, 0.191, 0.115, 0.115, 0.191, 0.191, 0.218, 0.144, 0.191, and 0.100 million British thermal units per hour (MMBtu/hr), respectively.
- (hh) One (1) natural gas-fired water heater, identified as #1, rated at 0.04 million British thermal units per hour (MMBtu/hr).

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, M097-25097-00622, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

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

B.8 Certification

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

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) All terms and conditions of permits established prior to M097-25097-00622 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

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

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

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

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

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

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

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

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

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 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.3 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.4 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.5 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.6 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.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

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

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.13 Response to Excursions or Exceedances

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

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

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

C.15 Malfunctions Report [326 IAC 1-6-2]

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

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

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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.

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

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

Source Name: Printing Partners, Inc.
Source Address: 929 W. 16th Street, Indianapolis, Indiana 46202
Mailing Address: 929 W. 16th Street, Indianapolis, Indiana 46202
MSOP No.: M097-25097-00622

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Printing Partners, Inc.
Address:	929 W. 16th Street
City:	Indianapolis, Indiana 46202
Phone #:	(317) 635-2282
MSOP #:	M097-25097-00622

I hereby certify that Printing Partners, Inc. is :

still in operation.

no longer in operation.

I hereby certify that Printing Partners, Inc. is :

in compliance with the requirements of MSOP M097-25097-00622.

not in compliance with the requirements of MSOP M097-25097-00622.

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

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

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

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

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

Indiana Department of Environmental Management Office of Air Quality

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

Source Description and Location
--

Source Name:	Printing Partners, Inc.
Source Location:	929 W. 16th Street, Indianapolis, Indiana 46202
County:	Marion
SIC Code:	2752
Operation Permit No.:	M097-25097-00622
Permit Reviewer:	Donald McQuigg

On August 3, 2007, the Office of Air Quality (OAQ) received an application from Printing Partners, Inc., relating to the operation of an existing commercial printing operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Attainment effective November 8, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion 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 PM2.5.

- (a) **Ozone Standards**
 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. Marion 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) **PM2.5**
Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions. These rules became effective on July 15, 2008. Therefore, direct PM2.5 and SO2 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**
Marion 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.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Printing Partners, Inc. on August 2, 2007, relating to an existing commercial printing operation. The source was constructed and operated prior to obtaining the proper permits from IDEM. The permit application submitted on August 2, 2007, did not contain all the information necessary to complete the permit review process. Additional information was received on April 21, 2008. The permit level for this source is a Minor Source Operating Permit (MSOP) since the uncontrolled potential to emit volatile organic compounds (VOC) is greater than twenty-five (25) tons per year and less than one hundred (100) tons per year.

The source consists of the following emission units:

- (a) One (1) Kodak Nuvera 120 Digital Printer, identified as EU-1, maximum line speed 120 ft/min and maximum print width 18 inches, installed on January 16, 2007, vented to stack #2.
- (b) One (1) Kodak Nuvera 120 Digital Printer, identified as EU-2, maximum line speed 120 ft/min and maximum print width 18 inches, installed on January 19, 2007, vented to stack #2.
- (c) One (1) Digimaster Digital Printer, identified as EU-3, maximum line speed 150 ft/min and maximum print width 18 inches, installed on June 29, 2006, vented to stack #2.
- (d) One (1) NexPress 2100 Plus Printer, identified as EU-4, maximum line speed 53 ft/min and maximum print width 18 inches, installed on March 1, 2006, vented to stack #1.
- (e) One (1) Kodak Plate Processor, identified as EU-5, maximum line speed 2 ft/min and maximum print width 40 inches, installed on July 1, 2002, vented to stack #3.
- (f) One (1) Video Jet #1 Ink Jet Printer, identified as EU-6, maximum line speed 472 ft/min and maximum print width 12 inches, installed on January 2, 2007, vented to stack #8.
- (g) One (1) Video Jet #2 Ink Jet Printer, identified as EU-7, maximum line speed 472 ft/min and maximum print width 12 inches, installed on February 2, 2007, vented to stack #8.

- (h) One (1) Heidelberg MO5P color press with coater, identified as EU-8, maximum line speed 381 ft/min and maximum print width 25 inches, installed on January 1, 2006, vented to stack #4.
- (i) One (1) Heidelberg MO5 color press with coater, identified as EU-9, maximum line speed 381 ft/min and maximum print width 25 inches, installed on June 1, 2000, vented to stack #5.
- (j) One (1) Heidelberg MO4 color press with coater, identified as EU-10, maximum line speed 381 ft/min and maximum print width 25 inches, installed on March 1, 2006, vented to stack #6.
- (k) One (1) Heidelberg SM40 color press with coater, identified as EU-11, maximum line speed 833 ft/min and maximum print width 40 inches, installed on February 7, 2006, vented to stack #7.
- (l) One (1) Heidelberg QM46 two (2) color press, identified as EU-12, maximum line speed 250 ft/min and maximum print width 12 inches, installed on April 1, 2004, vented to stack #8 General.
- (m) One (1) Heidelberg QM46 two (2) color press, identified as EU-13, maximum line speed 250 ft/min and maximum print width 12 inches, installed on April 1, 2004, vented to stack #8 General.
- (n) One (1) Ryobi 3202M two (2) color press, identified as EU-14, maximum line speed 250 ft/min and maximum print width 12 inches, installed on August 31, 2000, vented to stack #8 General.
- (o) One (1) Ryobi 975M two (2) color press, identified as EU-15, maximum line speed 200 ft/min and maximum print width 12 inches, installed on November 13, 2001, vented to stack #8 General.
- (p) One (1) Ryobi 3985 two (2) color press, identified as EU-16, maximum line speed 200 ft/min and maximum print width 12 inches, installed on March 5, 2002, vented to stack #8 General.
- (q) One (1) Ryobi 3200MCD two (2) color press, identified as EU-17, maximum line speed 200 ft/min and maximum print width 12 inches, installed on March 24, 2003, vented to stack #8 General.
- (r) One (1) Ryobi 3200CD two (2) color press, identified as EU-18, maximum line speed 200 ft/min and maximum print width 12 inches, installed on April 16, 2003, vented to stack #8 General.
- (s) One (1) Heidelberg MO4 two (2) color press, identified as EU-19, maximum line speed 381 ft/min and maximum print width 25 inches, installed on August 31, 2000, vented to stack #8 General.
- (t) One (1) Heidelberg WM Die Cutter, identified as EU-20, maximum throughput of 8.1345 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (u) One (1) Heidelberg WM Die Cutter, identified as EU-21, maximum throughput of 8.1345 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (v) One (1) Heidelberg WM Die Cutter, identified as EU-22, maximum throughput of 8.1345 lb/hr, installed on December 10, 2001, vented to stack #8 General.
- (w) One (1) Heidelberg WM Die Cutter, identified as EU-23, maximum throughput of 8.1345 lb/hr, installed on November 24, 2001, vented to stack #8 General.
- (x) One (1) Heidelberg WM S28 Die Cutter, identified as EU-24, maximum throughput of 29.4058 lb/hr, installed on May 21, 2002, vented to stack #8 General.
- (y) One (1) Polar Paper Cutter, identified as EU-25, maximum throughput of 265 lb/hr, installed on October 12, 2004, vented to stack #8 General.
- (z) One (1) Perfecta Paper Cutter, identified as EU-26, maximum throughput of 265 lb/hr, installed on

December 19, 2005, vented to stack #8 General.

- (aa) One (1) Perfecta Paper Cutter, identified as EU-27, maximum throughput of 265 lb/hr, installed on December 19, 2005, vented to stack #8 General.
- (bb) One (1) Stahl FT49 Paper Folder, identified as EU-28, maximum throughput of 62.64 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (cc) One (1) Stahl FT47 Paper Folder, identified as EU-29, maximum throughput of 62.64 lb/hr, installed on August 31, 2000, vented to stack #8 General.
- (dd) One (1) Stahl 56 Paper Folder with glue, identified as EU-30, maximum throughput of 62.64 lb/hr, installed on June 14, 2006, vented to stack #8 General.
- (ee) One (1) Stahl 66 Paper Folder with glue, identified as EU-31, maximum throughput of 62.64 lb/hr, installed on July 15, 2006, vented to stack #8 General.
- (ff) One (1) Stahl 1424B Paper Folder, identified as EU-32, maximum throughput of 62.64 lb/hr, installed on September 11, 2002, vented to stack #8 General.
- (gg) Ten (5) natural gas-fired roof top heaters, identified as #1 - 4 and #6-11, rated at 0.191, 0.191, 0.115, 0.115, 0.191, 0.191, 0.218, 0.144, 0.191, and 0.100 million British thermal units per hour (MMBtu/hr), respectively.
- (hh) One (1) natural gas-fired water heater, identified as #1, rated at 0.04 million British thermal units per hour (MMBtu/hr).

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	5.63
PM10 ⁽¹⁾	5.73
PM2.5	5.73
SO ₂	0.2
NO _x	0.7
VOC	47.39
CO	2.21

(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".

HAPs	Potential To Emit (tons/year)
Styrene	0.001
Acrylic Acid	0.005
Glycol ethers	0.021
Ethylene glycol	1.012
Diethanolamine	4.55
Cr(III) Compounds	0.44
Combustion HAPs	0.165
TOTAL HAPs	6.03

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of volatile organic compounds (VOC) is less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for the Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ (326 IAC 12), are not included in the permit, since this source does not use publication rotogravure printing presses.
- (b) The requirements of the New Source Performance Standard for Urethane Coating and Printing, 40 CFR 60, Subpart FFF (326 IAC 12), are not included in the permit, since this source does not print on or coat flexible vinyl or urethane products.
- (c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Printing and Publishing Industry, 40 CFR 63.820, Subpart KK (326 IAC 20-18), are not included in the permit, since this source is not a major source of HAPs.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paper and Other Web Coating, 40 CFR 63.3280, Subpart JJJJ (326 IAC 20-65), are not included in the permit, since this source utilizes only sheet fed printing presses and is not a major source of HAPs.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Printing, Coating, and Dyeing of Fabrics and Other Textiles, 40 CFR 63.4280, Subpart OOOO (326 IAC 20-77), are not included in the permit, since this source is not a major source, is not located at a major source, or is not part of a major source of hazardous air pollutants (HAP) and

the source does not operate web coating lines exclusively dedicated to coating or printing fabric and other textiles.

- (g) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.
- (h) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment New Source Review)
This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because the potential to emit all nonattainment regulated pollutants are less than 100 tons per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than ten 2.5 micrometers (PM2.5), is less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (f) 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 Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) 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.
 - (2) 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.

- (g) 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.

Surface Coating Operations (EU01-EU19)

- (h) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each printing press is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each printing press is less than twenty-five (25) tons per year. Therefore, 326 IAC 8-1-6 does not apply.
- (i) 326 IAC 8-2-5 (Paper Coating Operations)
The Printing Operation at this source is not a web coating or saturation process of paper, plastic, metal foil, or pressure sensitive tape and labels. Therefore, 326 IAC 8-2-5 is not applicable.
- (j) 326 IAC 8-5-5 (Graphic Arts Operations)
The Surface Coating Operation at this source utilizes sheet fed offset printing presses which are not considered packaging rotogravure, publication rotogravure, or flexographic printing. Therefore, 326 IAC 8-5-5 is not applicable.
- (k) There are no other 326 IAC 8 Rules that are applicable to the Printing Operations.

Gluing Operations (EU30, EU31)

- (l) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The Gluing Operation is not subject to the requirements of 326 IAC 8-1-6, since the unlimited potential VOC emissions from each gluing station is less than twenty-five (25) tons per year. Therefore, 326 IAC 8-1-6 does not apply.
- (m) There are no other 326 IAC 8 Rules that are applicable to the Gluing Operations.

Cutting Operations (EU20-EU32)

- (n) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(14), the Cutting Operation is exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), because the potential to emit particulate matter (PM) for each cutting station is less than 0.551 pounds per hour.
- (o) 326 IAC 6.5 (Particulate Emission Limitations Except Lake County)
The source is located in Marion County, but is not specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. The source does not have a potential to emit one hundred (100) tons or more of particulate matter and does not have actual emissions of ten (10) tons or more of particulate matter. Therefore, pursuant to 326 IAC 6.5-1-1(a), 326 IAC 6.5 does not apply.

Conclusion and Recommendation

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 August 2, 2007. Additional information was received April 21, 2008.

The operation of this source shall be subject to the conditions of the attached proposed MSOP No. M097-25097-00622. The staff recommends to the Commissioner that this MSOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Donald McQuigg at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-4240 or toll free at 1-800-451-6027 extension 4-4240.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations**Summary of Potential Emissions from Entire Source**

Company Name: Printing Partners, Inc.
Address, City IN Zip: 929 W 16th Street, Indianapolis, IN 46202
Permit No.: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Emission Unit	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons / yr)	Combined HAPS (tons / yr)
Surface Coating (EU01-19)	-	-	-	-	47.61	-	4.55 (diethanolamine)	6.029
Gluing Operations (EU30,31)	-	-	-	-	0.09	-	-	-
Cutting Operations (EU20-32)	5.63	5.63	-	-	-	-	-	-
Natural Gas-Fired Heaters	negligible	0.1	0.2	0.7	0.4	2.21	negligible	0.165
Insignificant Activities	-	-	-	-	7.7	-	-	-
Total	5.63	5.73	0.2	0.7	55.8	2.21	worst case: 4.55 (diethanolamine)	6.194

Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-1

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert in ² to MMin ²	Throughput (MMin ² /yr) ⁽¹⁾
1	Nuvera 120 Digital Printer	120	12	18	60	8,760	1,000,000	13,624

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs

Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾
Toner Dry Ink	0.455	0.00%	0.00%	13,624	2,000	100.00%	0.00
TOTAL VOC							0.00

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Appendix A: Emissions Calculations
VOC Emissions from Printing Press Operations EU-2

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert in ² to MMin ²	Throughput (MMin ² /yr) ⁽¹⁾
2	Nuvera 120 Digital Printer	120	12	18	60	8,760	1,000,000	13,624

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs							
Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾
Toner Dry Ink	0.455	0.00%	0.00%	13,624	2,000	100.00%	0.00
TOTAL VOC							0.00

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Appendix A: Emissions Calculations
VOC Emissions from Printing Press Operations EU-3

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert in ² to MMin ²	Throughput (MMin ² /yr) ⁽¹⁾
3	Kodak Digimaster Digital Printer	150	12	18	60	8,760	1,000,000	17,029

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs

Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾
Toner Dry Ink	0.455	0.00%	0.00%	17,029	2,000	100.00%	0.00
Developer	0.000	0.00%	0.00%	17,029	2,000	100.00%	0.00
TOTAL VOC							0.00

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006,

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Appendix A: Emissions Calculations
VOC Emissions from Printing Press Operations EU-4

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert in ² to MMin ²	Throughput (MMin ² /yr) ⁽¹⁾
4	Kodak NexPress	53	12	18	60	8,760	1,000,000	6,017

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs

Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾
Toner Dry Ink	0.455	0.00%	0.00%	6,017	2,000	100.00%	0.00
Developer	0.000	0.00%	0.00%	6,017	2,000	100.00%	0.00
TOTAL VOC							0.00

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Appendix A: Emissions Calculations VOC and HAP Emissions from Printing Press Operations EU-5

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Unit I.D.	Max Line Speed (ft/min)	Convert Feet to Inches	Max Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
5	Kodak Plate Procesor	2	12	40	60	8,760	1,000,000	404

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs											
Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	% Flash Off ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Max % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Diethanol amine (weight%)	Diethanolamine Emissions (tons/yr)	HAP Emissions (tons/yr)	
Kodak Polychrome Developer	2250.000	1.00%	100.00%	404	2,000	100.00%	4.55	1%	4.5	4.55	
Kodak Polychrome Finisher	2250.000	1.00%	100.00%	404	2,000	100.00%	4.55	0.00%	0.0	0.00	
Total VOC:							9.09	Single HAP:		4.55	
									Total HAP:		4.55

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, .

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Throughput (MMin²perYear) = Maxium line speed (feet per minute) *x Convert feet to inches x Maximum print width inches (in x in) x 60 minutes per hour*8760 hrs/yr

Appendix A: Emissions Calculations VOC and HAP Emissions from Printing Press Operations EU-6

Company Name: Printing Partners, Inc.

Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202

Permit No: M097-25097-00622

Reviewer: Donald McQuigg

Date: 11-Feb-09

Throughput								
Emission Unit #	Unit I.D.	Max Line Speed (ft/min)	Convert Feet to Inches	Max Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
6	Video Jet #1	472	12	12	60	8,760	1,000,000	35,724

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs										
Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	% Flash Off ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Max % Operation Time ⁽⁴⁾	VOC Emissions (tons / yr) ⁽⁵⁾	Cr(III) Compound (weight%)	Cr(III) Compound (tons/yr)	HAP Emissions (tons/yr)
Video Jet Ink	0.455	39.00%	100.00%	35,724	2,000	100.00%	3.17	7%	0.2	0.22
Video Jet Makeup	0.046	21.00%	100.00%	35,724	2,000	100.00%	0.17	0.00%	0.0	0.00
TOTAL VOC:							3.34	Single HAP:	0.22	
									Total HAP:	0.22

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, .

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Throughput (MMin²perYear) = Maximum line speed (feet per minute) * x Convert feet to inches x Maximum print width inches(in x in) x 60 minutes per hour*8760 hrs/yr

Appendix A: Emissions Calculations

VOC Emissions from Printing Press Operations EU-7

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Unit I.D.	Max Line Speed (ft/min)	Convert Feet to Inches	Max Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
7	Video Jet #2	472	12	12	60	8,760	1,000,000	35,724

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs										
Material (Worst case VOC content)	Maximum Coverage ⁽¹⁾ (lbs/MMin ²)	Weight % VOC ⁽²⁾	% Flash Off ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Max % Operation Time ⁽⁴⁾	VOC Emissions (tons / yr) ⁽⁵⁾	Cr(III) Compound (weight%)	Cr(III) Compound (tons/yr)	HAP Emissions (tons/yr)
Video Jet Ink	0.455	39.00%	100.00%	35,724	2,000	100.00%	3.17	7%	0.2	0.22
Video Jet Makeup	0.046	21.00%	100.00%	35,724	2,000	100.00%	0.17	0.00%	0.0	0.00
TOTAL VOC:							3.34	Single HAP:	0.22	
									Total HAP:	0.22

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, .

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Throughput (MMin²perYear) = Maximum line speed (feet per minute) * x Convert feet to inches x Maximum print width inches (in x in) x 60 minutes per hour * 8760 hrs/yr

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-8**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
8	Heidelberg MO 5P w/coater	381	12	25	60	8,760	1,000,000	60,076

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	% Flash Off ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tpy) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5%	60,076	2,000	100.00%	0.04	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive Co.)	2.500	3.20%	5%	60,076	2,000	100.00%	0.12	0.005%	0.042%	0.00%	0.016%	0.000	0.002	0.00	0.001	0.002	
Varnish (Braden Sutphin)	2.500	19.80%	5%	60,076	2,000	100.00%	0.74	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100%	60,076	2,000	100.00%	2.11	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.15	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100%	60,076	2,000	100.00%	0.36	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.15	0.00	0.147	
Total VOC:							3.37					Single HAP:	0.000	0.002	0.147	0.001	
Total HAP:															0.150		

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-9**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
9	Heidelberg MO 5 w/coater	381	12	25	60	8,760	1,000,000	60,076

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)
Ink (Braden Sutphin)	2.500	1.00%	5.00%	60,076	2,000	100.00%	0.04	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	60,076	2,000	100.00%	0.12	0.005%	0.042%	0.00%	0.016%	0.000	0.002	0.00	0.001	0.002
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	60,076	2,000	100.00%	0.74	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Blanket Wash (Prisco)	0.215	32.59%	100.00%	60,076	2,000	100.00%	2.11	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Fountain Solution (Prisco)	0.049	24.21%	100.00%	60,076	2,000	100.00%	0.36	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.15	0.00	0.147
Total VOC:							3.37					Single HAP:	0.000	0.002	0.147	0.001
Total HAP: 0.150																

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-10**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	8760 (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
10	Heidelberg MO 4 w/coater	381	12	25	60	8,760	1,000,000	60,076

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5.00%	60,076	2,000	100.00%	0.04	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive Co.)	2.500	3.20%	5.00%	60,076	2,000	100.00%	0.12	0.005%	0.042%	0.00%	0.016%	0.000	0.002	0.00	0.001	0.002	
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	60,076	2,000	100.00%	0.74	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100.00%	60,076	2,000	100.00%	2.11	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100.00%	60,076	2,000	100.00%	0.36	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.15	0.00	0.147	
TOTAL VOC							3.37					Single HAP:	0.000	0.002	0.147	0.001	
															Total HAP:	0.150	

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-11**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
11	Heidelberg SM 40-5 w/coater	833	12	40	60	8,760	1,000,000	210,156

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs																	
Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5.00%	210,156	2,000	100.00%	0.13	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	210,156	2,000	100.00%	0.42	0.005%	0.042%	0.00%	0.016%	0.001	0.006	0.00	0.002	0.008	
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	210,156	2,000	100.00%	2.60	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100.00%	210,156	2,000	100.00%	7.38	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100.00%	210,156	2,000	100.00%	1.25	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.52	0.00	0.515	
TOTAL VOC							11.78				Single HAP:		0.001	0.006	0.515	0.002	
																Total HAP:	0.524

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press "make-ready" time as discussed in the EPA-453/R-06-002, September 2006,

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-12**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
12	Heidelberg QM 46-2	250	12	12	60	8,760	1,000,000	18,922

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)
Ink (Braden Sutphin)	2.500	1.00%	5.00%	18,922	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Coating (Coating&Adhesive Co.)	2.500	3.20%	5.00%	18,922	2,000	100.00%	0.04	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.00	0.000	0.001
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	18,922	2,000	100.00%	0.23	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Blanket Wash (Prisco)	0.215	32.59%	100.00%	18,922	2,000	100.00%	0.66	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Fountain Solution (Prisco)	0.049	24.21%	100.00%	18,922	2,000	100.00%	0.11	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.05	0.00	0.046
Total VOC:							1.06					Single HAP:	0.000	0.000	0.046	0.000
Total HAP:																0.047

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-13**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
13	Heidelberg QM 46-2	250	12	12	60	8,760	1,000,000	18,922

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)
Ink (Braden Sutphin)	2.500	1.00%	5.00%	18,922	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	18,922	2,000	100.00%	0.04	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.000	0.000	0.001
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	18,922	2,000	100.00%	0.23	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Blanket Wash (Prisco)	0.215	32.59%	100.00%	18,922	2,000	100.00%	0.66	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Fountain Solution (Prisco)	0.049	24.21%	100.00%	18,922	2,000	100.00%	0.11	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.05	0.00	0.046
TOTAL VOC:							1.06					Single HAP:	0.000	0.000	0.046	0.000
Total HAP:																0.047

Notes

- ⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers
- ⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses
- ⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.
- ⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-14**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
14	Ryobi 3202 M	250	12	12	60	8,760	1,000,000	18,922

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs																	
Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5.00%	18,922	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	18,922	2,000	100.00%	0.04	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.00	0.000	0.001	
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	18,922	2,000	100.00%	0.23	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100.00%	18,922	2,000	100.00%	0.66	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100.00%	18,922	2,000	100.00%	0.11	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.05	0.00	0.046	
Total VOC:							1.06					Single HAP:			0.000	0.047	
																Total HAP:	0.047

Notes

- ⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers
- ⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses
- ⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.
- ⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-15**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
15	Ryobi 3202 M	200	12	12	60	8,760	1,000,000	15,137

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)
Ink (Braden Sutphin)	2.500	1.00%	5.00%	15,137	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	15,137	2,000	100.00%	0.03	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.000	0.000	0.001
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	15,137	2,000	100.00%	0.19	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Blanket Wash (Prisco)	0.215	32.59%	100.00%	15,137	2,000	100.00%	0.53	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Fountain Solution (Prisco)	0.049	24.21%	100.00%	15,137	2,000	100.00%	0.09	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.04	0.00	0.037
Total VOC:							0.85					Single HAP:	0.000	0.000	0.037	0.000
Total HAP:																0.038

Notes

- ⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers
- ⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses
- ⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.
- ⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-16**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
16	Ryobi 3985	200	12	12	60	8,760	1,000,000	15,137

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)
Ink (Braden Sutphin)	2.500	1.00%	5.00%	15,137	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	15,137	2,000	100.00%	0.03	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.00	0.000	0.001
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	15,137	2,000	100.00%	0.19	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Blanket Wash (Prisco)	0.215	32.59%	100.00%	15,137	2,000	100.00%	0.53	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000
Fountain Solution (Prisco)	0.049	24.21%	100.00%	15,137	2,000	100.00%	0.09	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.04	0.00	0.037
Total VOC:							0.85					Single HAP:	0.000	0.000	0.037	0.000
Total HAP:																0.038

Notes

- ⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers
- ⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses
- ⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.
- ⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-17**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
17	Ryobi 3200 MCD	200	12	12	60	8,760	1,000,000	15,137

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5.00%	15,137	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	15,137	2,000	100.00%	0.03	0.005%	0.042%	0.00%	0.016%	0.000	0.000	0.00	0.000	0.001	
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	15,137	2,000	100.00%	0.19	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100.00%	15,137	2,000	100.00%	0.53	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100.00%	15,137	2,000	100.00%	0.09	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.04	0.00	0.037	
Total VOC:							0.85					Single HAP:	0.000	0.000	0.037	0.000	
															Total HAP:		0.038

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-18**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
18	Ryobi 3200 CD	200	12	12	60	8,760	1,000,000	15,137

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOCs and HAPs

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)	
Ink (Braden Sutphin)	2.500	1.00%	5.00%	15,137	2,000	100.00%	0.01	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Coating (Coating&Adhesive corp.)	2.500	3.20%	5.00%	15,137	2,000	100.00%	0.03	0.005%	0.042%	0.00%	0.016%	0.0000	0.0004	0.00	0.000	0.001	
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	15,137	2,000	100.00%	0.19	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Blanket Wash (Prisco)	0.215	32.59%	100.00%	15,137	2,000	100.00%	0.53	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000	
Fountain Solution (Prisco)	0.049	24.21%	100.00%	15,137	2,000	100.00%	0.09	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.04	0.00	0.037	
Total VOC:							0.85					Single HAP:	0.000	0.000	0.037	0.000	
															Total HAP:		0.038

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
VOC and HAP Emissions from Printing Press Operations EU-19**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Throughput								
Emission Unit #	Press I.D.	Maximum Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	Convert (min/hr)	Convert (hr/yr)	Convert	Throughput (MMin ² /yr) ⁽¹⁾
19	Heidelberg MO 2 color	381	12	25	60	8,760	1,000,000	60,076

Methodology

⁽¹⁾ Throughput (MMin²/year) = Maximum line speed feet per minute * 12 inches/ft * Maximum print width inches * 60 minutes/hour * 8760 hours/year * 1/1,000,000 conversion

PTE for VOC and HAP

Category Name (Product with highest VOC content)	Maximum Coverage (lbs/MMin ²) ⁽¹⁾	Weight % VOC ⁽²⁾	Flash Off % ⁽³⁾	Throughput (MMin ² /yr)	Convert (lb/ton)	Maximum % Operation Time ⁽⁴⁾	VOC Emissions (tons/yr) ⁽⁵⁾	Styrene (weight%)	Carbitol (weight%)	Ethylene glycol (weight%)	Acrylic Acid (weight%)	Styrene (tons/yr)	Carbitol (tons/yr)	Ethylene glycol (tons/yr)	Acrylic Acid (tons/yr)	HAP Emissions (tons/yr)		
Ink (Braden Sutphin)	2.500	1.00%	5.00%	60,076	2,000	100.00%	0.04	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000		
Coating (Coating&Adhesive Co.)	2.500	3.20%	5.00%	60,076	2,000	100.00%	0.12	0.005%	0.042%	0.00%	0.016%	0.000	0.002	0.00	0.001	0.002		
Varnish (Braden Sutphin)	2.500	19.80%	5.00%	60,076	2,000	100.00%	0.74	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000		
Blanket Wash (Prisco)	0.215	32.59%	100.00%	60,076	2,000	100.00%	2.11	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.000		
Fountain Solution (Prisco)	0.049	24.21%	100.00%	60,076	2,000	100.00%	0.36	0.00%	0.00%	10.00%	0.00%	0.00	0.00	0.15	0.00	0.147		
Total VOC:							3.37					Single HAP:		0.000	0.002	0.147	0.001	
Total HAP:																	0.150	

Notes

⁽¹⁾ Maximum coverage rate for each category is determined by the actual product usage increased by a safety factor to represent maximum usages for these commercial printers

⁽²⁾ Weight % VOC is determined from the MSDS for the "worst case" product within the appropriate category used on the identified presses

⁽³⁾ Flash off % is determined from the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

⁽⁴⁾ Maximum % operation time assumes 100% and does not take into account the press' "make-ready" time as discussed in the EPA-453/R-06-002, September 2006, Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, document.

Methodology

⁽⁵⁾ VOC (tons per year) = Maximum Coverage x Weight % VOC x Flash Off % x Throughput x 1 ton/2000 pounds x Maximum % Operation Time

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.69

14.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	28.5	100	5.5	84
				**see below		
Potential Emission in tons/yr	0.0	0.1	0.2	0.7	0.04	0.6

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

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

See page 22 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.552E-05	8.867E-06	5.542E-04	1.330E-02	2.512E-05

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.695E-06	8.128E-06	1.034E-05	2.808E-06	1.552E-05

Methodology is the same as page 21.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
PM and PM10 Emissions
Three (3) Paper Cutters**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

ID	Cutters	Maximum Throughput - Paper Processed (lbs/hr)	Maximum Throughput (ton/yr)	Emission Factor (lb/ton)	Potential to Emit (PTE) of PM/PM10 before Control (ton/yr)
EU 25	Polar Cutter	265.0	1160.70	1.8	1.04
EU 26	Perfecta Cutter	265.0	1160.70	1.8	1.04
EU 27	Perfecta Cutter	195.0	854.10	1.8	0.77
	Total	530.0	2321.4	1.8	2.86

Methodology

Note: These emission units have no control. Assume PM10 emissions=PM emissions.

Potential to Emit PM/PM10 (tons/yr) = Max. Throughput Paper Processed (lbs/hr) x 8760 (hr/yr) x 1 tons/2000 lbs x Emission factor
PM Emission Factors: There are no emission factors for paper under AP-42, Chapter 10. A similar emission factor for manual cutting was utilized from plastic and wood cutting operation from FIRE Version 6.22 for log sawing (SCC#3-07-008-02).

**Appendix A: Emissions Calculations
PM and PM10 Emissions from
Die Cutting/Paper Folding Operations (EU20-EU32)**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Die Cutting/Folder Ops

Unit	Process	Units processed		Unit Weight (lbs / sf)	Maximum Throughput		PM Emission Factor (lb/ton)	Uncontrolled PM Emissions (ton/yr)
					lb/hr	ton/yr		
EU 20	Die Cutter "Heidelberg WM"	46,750	sq.ft/hr	0.0001740	8.13450	35.629	1.8	0.0321
EU 21	Die Cutter "Heidelberg WM"	46,750	sq.ft/hr	0.0001740	8.13450	35.629	1.8	0.0321
EU 22	Die Cutter "Heidelberg WM"	46,750	sq.ft/hr	0.0001740	8.13450	35.629	1.8	0.0321
EU 23	Die Cutter "Heidelberg WM"	46,750	sq.ft/hr	0.0001740	8.13450	35.629	1.8	0.0321
EU 24	Die Cutter "Heidelberg WM S 28"	168,999	sq.ft/hr	0.0001740	29.40583	128.798	1.8	0.1159
EU 28	Stahl Folder FT49	360,000	sq.ft/hr	0.0001740	62.64000	274.363	1.8	0.2469
EU 29	Stahl Folder FT47	360,000	sq.ft/hr	0.0001740	62.64000	274.363	1.8	0.2469
EU 30	Stahl Folder 1424	989,583	sq.ft/hr	0.0001740	172.18750	754.181	1.8	0.6788
EU 31	Stahl Folder FT56	989,583	sq.ft/hr	0.0001740	172.18750	754.181	1.8	0.6788
EU 32	Stahl Folder FT66	989,583	sq.ft/hr	0.0001740	172.18750	754.181	1.8	0.6788
Total:								2.774

Methodology

Note: These emission units have no control. Assume PM10 emissions=PM emissions.

Potential to Emit PM/PM10 (tons/yr) = Max. Throughput Paper Processed (lbs/hr) x 8760 (hr/yr) x 1 tons/2000 lbs x Emission factor

PM Emission Factors: There are no emission factors for paper under AP-42, Chapter 10. A similar emission factor for manual cutting was utilized from plastic and wood cutting operation from FIRE Version 6.22 for log sawing (SCC#3-07-008-02).

**Appendix A: Emissions Calculations
VOC Emissions from the Gluing Operations (EU30 & EU31)**

Company Name: Printing Partners, Inc.
Address City IN Zip : 929 W 16th Street, Indianapolis, IN 46202
Permit No: M097-25097-00622
Reviewer: Donald McQuigg
Date: 11-Feb-09

Glue

Maximum Glue usage per hour:	0.130	gal/hr
Glue Density:	8.090	lb/gal

Unit	Folders w/glue	Maximum Line Speed (lbs/hr)	Material	VOC (weight %)	Potential Emissions (tons/yr)
EU 30	Stahl Folder FT56	0.13	Bostik Hot melt adhesive 2mm Dot	1%	0.046
EU 31	Stahl Folder FT66	0.13	Bostik Hot melt adhesive 2mm Dot	1%	0.046
Total:					0.092

Methodology

VOC emissions (ton/yr) = Density (lb/gal) x Maximum Glue usage (gal/hr) x Weight % x 8,760 hrs/yr x 1 ton/2,000 lbs