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: February 3, 2009

RE: RR Donnelley / 151-26435-00034

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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Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

RR Donnelley
611 W. Mill St.
Angola, Indiana 46703

(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.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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 FESOP under 326 IAC 2-8.

Operation Permit No.: F151-26435-00034	
Issued by: Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: February 3, 2009 Expiration Date: February 3, 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 through A.3 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 2-8-3(b)]

The Permittee owns and operates a stationary pressure sensitive and bar-coded products manufacturing plant using lithographic and flexographic printing to produce business forms and labels.

Source Address:	611 W. Mill St., Angola, Indiana 46703
Mailing Address:	611 W. Mill St., Angola, IN 46703
General Source Phone Number:	260-665-9421
SIC Code:	2759, 2752, 2672
County Location:	Steuben
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State 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 [326 IAC 2-8-3(c)(3)]

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

(a) One (1) lithographic printing press, identified as Press # 49, constructed in 1986, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches;

(b) One (1) lithographic printing press, identified as Press # 50, constructed in 1985, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches, exhausting to stacks # 3 and #4;

(c) One (1) lithographic printing press, identified as Press # 71, constructed in 2000, with a maximum line speed of twelve hundred (1200) feet per minute and a printing width of twenty (20) inches, exhausting to stack # 5;

(d) One (1) flexographic printing press, identified as Press # 4, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 73 and # 74;

(e) One (1) flexographic printing press, identified as Press # 9, constructed in 1991, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 23;

(f) One (1) flexographic printing press, identified as Press # 10, constructed in 1994, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack S1;

(g) One (1) flexographic printing press, identified as Press # 11, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 23;

(h) One (1) flexographic printing press, identified as Press # 34, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack S1;

(i) One (1) flexographic printing press, identified as Press # 35, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack # 21;

(j) One (1) flexographic printing press, identified as Press # 48, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(k) One (1) flexographic printing press, identified as Press # 52, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(l) One (1) flexographic printing press, identified as Press # 53, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 16 and # 21;

(m) One (1) flexographic printing press, identified as Press # 58, constructed in 1988, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 22;

(n) One (1) flexographic printing press, identified as Press # 62, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 12 and # 16;

(o) One (1) flexographic printing press, identified as Press # 63, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 22;

(p) One (1) flexographic printing press, identified as Press # 66, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 75, # 76 and # 77;

(q) One (1) flexographic printing press, identified as Press # 67, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 8, # 9 and # 10;

(r) One (1) coater, identified as C1, constructed in 1994, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 59;

(s) One (1) coater, identified as C2, constructed in 2000, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 60; and

(t) One (1) Linerless Flexographic Printing Press, identified as Press # 68, constructed in 2005, with a maximum line speed of seven hundred and fifty (750) feet per minute and a maximum printing width of twenty (20) inches and exhausting to three (3) stacks , identified as 78, 79 and 80.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

Activities emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:

(a) Three (3) tamaracks;

(b) Plate wash unit;

(c) Seven (7) collators;

(d) Two (2) parts cleaners, installed in 1982 and 1991; and

(e) One (1) automated plate making machine, installed in 2008.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F151-26435-00034, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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 [326 IAC 2-8-4(4)]

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 [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(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 [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(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 Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

(b) The annual compliance certification report 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) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F151-26435-00034 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.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months 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 2-8 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.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][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 FESOP 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.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) 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.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

(a) The requirements to obtain a permit modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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 forty percent (40%) 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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 Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and 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. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification 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).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision 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] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(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 [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(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).

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(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.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(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 startup, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(c) 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.

(d) 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).

(e) 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.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) lithographic printing press, identified as Press # 49, constructed in 1986, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches;

(b) One (1) lithographic printing press, identified as Press # 50, constructed in 1985, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches, exhausting to stacks # 3 and #4;

(c) One (1) lithographic printing press, identified as Press # 71, constructed in 2000, with a maximum line speed of twelve hundred (1200) feet per minute and a printing width of twenty (20) inches, exhausting to stack # 5;

(d) One (1) flexographic printing press, identified as Press # 4, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 73 and # 74;

(e) One (1) flexographic printing press, identified as Press # 9, constructed in 1991, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 23;

(f) One (1) flexographic printing press, identified as Press # 10, constructed in 1994, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack S1;

(g) One (1) flexographic printing press, identified as Press # 11, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 23;

(h) One (1) flexographic printing press, identified as Press # 34, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack S1;

(i) One (1) flexographic printing press, identified as Press # 35, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack # 21;

(j) One (1) flexographic printing press, identified as Press # 48, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(k) One (1) flexographic printing press, identified as Press # 52, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(l) One (1) flexographic printing press, identified as Press # 53, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 16 and # 21;

(m) One (1) flexographic printing press, identified as Press # 58, constructed in 1988, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 22;

(n) One (1) flexographic printing press, identified as Press # 62, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 12 and # 16;

(o) One (1) flexographic printing press, identified as Press # 63, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 22;

(p) One (1) flexographic printing press, identified as Press # 66, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 75, # 76 and # 77;

(q) One (1) flexographic printing press, identified as Press # 67, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 8, # 9 and # 10;

(r) One (1) coater, identified as C1, constructed in 1994, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 59;

(s) One (1) coater, identified as C2, constructed in 2000, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 60; and

(t) One (1) Linerless Flexographic Printing Press, identified as Press # 68, constructed in 2005, with a maximum line speed of seven hundred and fifty (750) feet per minute and a maximum printing width of twenty (20) inches and exhausting to three (3) stacks , identified as 78, 79 and 80.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compound (VOC) Limit [326 IAC 2-8-4] [326 IAC 8-5-5]

The total input usage of volatile organic compounds (VOC) at the three (3) lithographic printing presses, identified as Press #49, Press #50 and Press #71, the fifteen (15) flexographic printing presses, identified as Press #4, Press #9, Press #10, Press #11, Press #34, Press #35, Press #48, Press #52, Press #53, Press #58, Press #62, Press #63, Press #66, Press #67, and Press #68, the two (2) coaters, identified as C1 and C2, and the seven (7) insignificant collators, including VOC usage for clean-up, shall be limited to less than 24.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this usage limit, including the potential to emit for insignificant activities, will limit the source-wide potential to emit of VOC to less than 25 tons per year and render 326 IAC 8-5-5 (Graphic Arts Operations) not applicable to any emissions units at the source.

Compliance with the VOC usage limit for the lithographic printing, flexographic printing, coating operations, and insignificant collators, combined with the potential VOC emissions from the insignificant activities shall limit the total potential VOC emissions from the source to less than one hundred (100) tons per year and make 326 IAC 2-7 (Part 70) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-5]

Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the volatile organic compound (VOC) content of coatings applied to labels of any substrate, or pressure sensitive tapes, or paper, plastic or metal foil by means of web coating through the Linerless Flexographic Printing Press, identified as Press #68, shall be limited to 2.9 pounds VOC per gallon of coating less water delivered to the applicator.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC)[326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.5 Record Keeping Requirements [326 IAC 12] [40 CFR 60.445(a)(h)]

(a) Pursuant to 60.445(a), the Permittee shall maintain a calendar month record of all coatings used and the manufacturer’s formulation data used for determining the VOC content of those coatings.

Pursuant to 60.445(h), these records shall be retained for at least two years following the date of the measurements and made available upon request of the Office of Air Quality.

(b) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material, ink, and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(3) The amount of solids in each ink used by the flexographic printing presses;

(4) The cleanup solvent usage for each month;

(5) The total VOC usage for each month; and

(6) The weight of VOCs emitted for each compliance period.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

Activities emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:

(a) Three (3) tamaracks;

(b) Plate wash unit;

(c) Seven (7) collators;

(d) Two (2) parts cleaners, installed in 1982 and 1991; and

(e) One (1) automated plate making machine, installed in 2008.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: RR Donnelley
Source Address: 611 W. Mill St., Angola, Indiana 46703
Mailing Address: 611 W. Mill St., Angola, IN 46703
FESOP Permit No.: F151-26435-00034

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: RR Donnelley
Source Address: 611 W. Mill St., Angola, Indiana 46703
Mailing Address: 611 W. Mill St., Angola, IN 46703
FESOP Permit No.: F151-26435-00034

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: RR Donnelley
Source Address: 611 W. Mill St., Angola, Indiana 46703
Mailing Address: 611 W. Mill St., Angola, IN 46703
FESOP Permit No.: F151-26435-00034
Facility: Lithographic Presses, Flexographic Presses, Coaters and Collators
Parameter: VOC
Limit: VOC usage of less than 24.0 tons, including inks, coatings, adhesives, release agents, additives, reducers and solvents per 12 consecutive month period for the lithographic printing, flexographic printing, coating operations, and collators combined, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: RR Donnelley
Source Address: 611 W. Mill St., Angola, Indiana 46703
Mailing Address: 611 W. Mill St., Angola, IN 46703
FESOP Permit No.: F151-26435-00034

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Attachment A: Applicable NSPS requirements

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart QQ—Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing

Source: 47 FR 50649, Nov. 8, 1982, unless otherwise noted.

§ 60.430 Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which the provisions of this subpart apply is each publication rotogravure printing press.

(b) The provisions of this subpart do not apply to proof presses.

(c) Any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after October 28, 1980 is subject to the requirements of this subpart.

§ 60.431 Definitions and notations.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the Act and in subpart A of this part.

Automatic temperature compensator means a device that continuously senses the temperature of fluid flowing through a metering device and automatically adjusts the registration of the measured volume to the corrected equivalent volume at a base temperature.

Base temperature means an arbitrary reference temperature for determining liquid densities or adjusting the measured volume of a liquid quantity.

Density means the mass of a unit volume of liquid, expressed as grams per cubic centimeter, kilograms per liter, or pounds per gallon, at a specified temperature.

Gravure cylinder means a printing cylinder with an intaglio image consisting of minute cells or indentations specially engraved or etched into the cylinder's surface to hold ink when continuously revolved through a fountain of ink.

Performance averaging period means 30 calendar days, one calendar month, or four consecutive weeks as specified in sections of this subpart.

Proof press means any device used only to check the quality of the image formation of newly engraved or etched gravure cylinders and prints only non-saleable items.

Publication rotogravure printing press means any number of rotogravure printing units capable of printing simultaneously on the same continuous web or substrate and includes any associated device for continuously cutting and folding the printed web, where the following saleable paper products are printed:

Catalogues, including mail order and premium,

Direct mail advertisements, including circulars, letters, pamphlets, cards, and printed envelopes,

Display advertisements, including general posters, outdoor advertisements, car cards, window posters; counter and floor displays; point-of-purchase, and other printed display material,

Magazines,

Miscellaneous advertisements, including brochures, pamphlets, catalogue sheets, circular folders, announcements, package inserts, book jackets, market circulars, magazine inserts, and shopping news,

Newspapers, magazine and comic supplements for newspapers, and preprinted newspaper inserts, including hi-fi and spectacolor rolls and sections,

Periodicals, and

Telephone and other directories, including business reference services.

Raw ink means all purchased ink.

Related coatings means all non-ink purchased liquids and liquid-solid mixtures containing VOC solvent, usually referred to as extenders or varnishes, that are used at publication rotogravure printing presses.

Rotogravure printing unit means any device designed to print one color ink on one side of a continuous web or substrate using a gravure cylinder.

Solvent-borne ink systems means ink and related coating mixtures whose volatile portion consists essentially of VOC solvent with not more than five weight percent water, as applied to the gravure cylinder.

Solvent recovery system means an air pollution control system by which VOC solvent vapors in air or other gases are captured and directed through a condenser(s) or a vessel(s) containing beds of activated carbon or other adsorbents. For the condensation method, the solvent is recovered directly from the condenser. For the adsorption method, the vapors are adsorbed, then desorbed by steam or other media, and finally condensed and recovered.

VOC means volatile organic compound.

VOC solvent means an organic liquid or liquid mixture consisting of VOC components.

Waterborne ink systems means ink and related coating mixtures whose volatile portion consists of a mixture of VOC solvent and more than five weight percent water, as applied to the gravure cylinder.

(b) Symbols used in this subpart are defined as follows:

D_B=the density at the base temperature of VOC solvent used or recovered during one performance averaging period.

D_{ci}=the density of each color of raw ink and each related coating (i) used at the subject facility (or facilities), at the coating temperature when the volume of coating used is measured.

D_{di}=the density of each VOC solvent (i) added to the ink for dilution at the subject facility (or facilities), at the solvent temperature when the volume of solvent used is measured.

D_{gi}=the density of each VOC solvent (i) used as a cleaning agent at the subject facility (or facilities), at the solvent temperature when the volume of cleaning solvent used is measured.

D_{hi}=the density of each quantity of water (i) added at the subject facility (or facilities) for dilution of waterborne ink systems at the water temperature when the volume of dilution water used is measured.

D_{mi}=the density of each quantity of VOC solvent and miscellaneous solvent-borne waste inks and waste VOC solvents (i) recovered from the subject facility (or facilities), at the solvent temperature when the volume of solvent recovered is measured.

D_{oi}=the density of the VOC solvent contained in each raw ink and related coating (i) used at the subject facility (or facilities), at the coating temperature when the volume of coating used is measured.

D_{wi}=the density of the water contained in each waterborne raw ink and related coating (i) used at the subject facility (or facilities), at the coating temperature when the volume of coating used is measured.

L_{ci}=the measured liquid volume of each color of raw ink and each related coating (i) used at the facility of a corresponding VOC content, V_{oi}or $W_{oi,}$with a VOC density, $D_{oi,}$and a coating density, D_{ci}.

L_{di}=the measured liquid volume of each VOC solvent (i) with corresponding density, $D_{di,}$added to dilute the ink used at the subject facility (or facilities)

M_{ci}=the mass, determined by direct weighing, of each color of raw ink and each related coating (i) used at the subject facility (or facilities).

M_d=the mass, determined by direct weighing, of VOC solvent added to dilute the ink used at the subject facility (or facilities) during one performance averaging period.

M_g=the mass, determined by direct weighing, of VOC solvent used as a cleaning agent at the subject facility (or facilities) during one performance averaging period.

M_h=the mass, determined by direct weighing, of water added for dilution with waterborne ink systems used at the subject facility (or facilities) during one performance averaging period.

M_m=the mass, determined by direct weighing, of VOC solvent and miscellaneous solvent-borne waste inks and waste VOC solvents recovered from the subject facility (or facilities) during one performance averaging period.

M_o=the total mass of VOC solvent contained in the raw inks and related coatings used at the subject facility (or facilities) during one performance averaging period.

M_r=the total mass of VOC solvent recovered from the subject facility (or facilities) during one performance averaging period.

M_t=the total mass of VOC solvent used at the subject facility (or facilities) during one performance averaging period.

M_v=the total mass of water used with waterborne ink systems at the subject facility (or facilities) during one performance averaging period.

M_w=the total mass of water contained in the waterborne raw inks and related coatings used at the subject facility (or facilities) during one performance averaging period.

P=the average VOC emission percentage for the subject facility (or facilities) for one performance averaging period.

V_{oi}=the liquid VOC content, expressed as a volume fraction of VOC volume per total volume of coating, of each color of raw ink and related coating (i) used at the subject facility (or facilities).

V_{wi}=the water content, expressed as a volume fraction of water volume per total volume of coating, of each color of waterborne raw ink and related coating (i) used at the subject facility (or facilities).

W_{oi}=the VOC content, expressed as a weight fraction of mass of VOC per total mass of coating, of each color of raw ink and related coating (i) used at the subject facility (or facilities).

W_{wi}=the water content, expressed as a weight fraction of mass of water per total mass of coating, of each color of waterborne raw ink and related coating (i) used at the subject facility (or facilities).

(c) The following subscripts are used in this subpart with the above symbols to denote the applicable facility:

a=affected facility.

b=both affected and existing facilities controlled in common by the same air pollution control equipment.

e=existing facility.

f=all affected and existing facilities located within the same plant boundary.

[47 FR 50649, Nov. 8, 1982, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.432 Standard for volatile organic compounds.

During the period of the performance test required to be conducted by §60.8 and after the date required for completion of the test, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility VOC equal to more than 16 percent of the total mass of VOC solvent and water used at that facility during any one performance averaging period. The water used includes only that water contained in the waterborne raw inks and related coatings and the water added for dilution with waterborne ink systems.

§ 60.433 Performance test and compliance provisions.

(a) The owner or operator of any affected facility (or facilities) shall conduct performance tests in accordance with §60.8, under the following conditions:

(1) The performance averaging period for each test is 30 consecutive calendar days and not an average of three separate runs as prescribed under §60.8(f).

(2) Except as provided under paragraphs (f) and (g) of this section, if affected facilities routinely share the same raw ink storage/handling system with existing facilities, then temporary measurement procedures for segregating the raw inks, related coatings, VOC solvent, and water used at the affected facilities must be employed during the test. For this case, an overall emission percentage for the combined facilities as well as for only the affected facilities must be calculated during the test.

(3) For the purpose of measuring bulk storage tank quantities of each color of raw ink and each related coating used, the owner or operator of any affected facility shall install, calibrate, maintain, and continuously operate during the test one or more:

(i) Non-resettable totalizer metering device(s) for indicating the cumulative liquid volumes used at each affected facility; or

(ii) Segregated storage tanks for each affected facility to allow determination of the liquid quantities used by measuring devices other than the press meters required under item (i) of this article; or

(iii) Storage tanks to serve more than one facility with the liquid quantities used determined by measuring devices other than press meters, if facilities are combined as decribed under paragraph (d), (f), or (g) of this section.

(4) The owner or operator may choose to install an automatic temperature compensator with any liquid metering device used to measure the raw inks, related coatings, water, or VOC solvent used, or VOC solvent recovered.

(5) Records of the measured amounts used at the affected facility and the liquid temperature at which the amounts were measured are maintained for each shipment of all purchased material on at least a weekly basis for:

(i) The raw inks and related coatings used;

(ii) The VOC and water content of each raw ink and related coating used as determined according to §60.435;

(iii) The VOC solvent and water added to the inks used;

(iv) The VOC solvent used as a cleaning agent; and

(v) The VOC solvent recovered.

(6) The density variations with temperature of the raw inks, related coatings, VOC solvents used, and VOC solvent recovered are determined by the methods stipulated in §60.435(d).

(7) The calculated emission percentage may be reported as rounded-off to the nearest whole number.

(8) Printing press startups and shutdowns are not included in the exemption provisions under §60.8(c). Frequent periods of press startups and shutdowns are normal operations and constitute representative conditions for the purpose of a performance test.

(b) If an affected facility uses waterborne ink systems or a combination of waterborne and solvent-borne ink systems with a solvent recovery system, compliance is determined by the following procedures, except as provided in paragraphs (d), (e), (f), and (g) of this section:

(1) The mass of VOC in the solvent-borne and waterborne raw inks and related coatings used is determined by the following equation:

$$\left(M_o\right)_a = \sum_{i=1}^{k}\left(M_{ci}\right)_a\left(W_{oi}\right)_a + \sum_{i=1}^{m}\left(L_{ci}\right)_a\left(D_{ci}\right)_a\left(W_{OI}\right)_a + \sum_{i=1}^{n}\left(L_{ci}\right)_a\left(V_{oi}\right)_a\left(D_{oi}\right)_a$$

where:

k is the total number of raw inks and related coatings measured as used in direct mass quantities with different amounts of VOC content.

m is the total number of raw inks and related coatings measured as used by volume with different amounts of VOC content or different densities.

n is the total number of raw inks and related coatings measured as used by volume with different amounts of VOC content or different VOC solvent densities.

(2) The total mass of VOC used is determined by the following equation:

$$(M_t)_a = (M_o)_a + \sum_{i=1}^{m} (L_{di})_a (D_{di})_a + (M_d)_a + \sum_{i=1}^{n} (L_{gi})_a (d_{gi})_a + (M_g)_a$$

where “m” and “n” are the respective total numbers of VOC dilution and cleaning solvents measured as used by volume with different densities.

(3) The mass of water in the waterborne raw inks and related coatings used is determined by the following equation:

$$(M_w)_a = \sum_{i=1}^{k} (M_{ci})_a (W_{wi})_a + \sum_{i=1}^{m} (L_{ci})_a (D_{ci})_a (W_{wi})_a + \sum_{i=1}^{n} (L_{ci})_a (V_{wi})_a (D_{wi})_a$$

where:

k is the total number of raw inks and related coatings measured as used in direct mass quantities with different amounts of water content.

m is the total number of raw inks and related coatings measured as used by volume with different amounts of water content or different densities.

n is the total number of raw inks and related coatings measured as used by volume with different amounts of water content or different water densities.

(4) The total mass of water used is determined by the following equation:

$$(M_v)_a = (M_w)_a + (M_h)_a + \sum_{i=1}^{m} (L_{hi})_a (D_{hi})_a$$

where “m” is the total number of water dilution additions measured as used by volume with different densities.

(5) The total mass of VOC solvent recovered is determined by the following equation:

$$(M_r)_a = (M_m)_a + \sum_{i=1}^{k} (L_{mi})_a (D_{mi})_a$$

where “k” if the total number of VOC solvents, miscellaneous solvent-borne waste inks, and waste VOC solvents measured as recovered by volume with different densities.

(6) The average VOC emission percentage for the affected facility is determined by the following equation:

$$P_a = \left[\frac{(M_t)_a - (M_r)_a}{(m_t)_a + (M_v)_a} \right] x100$$

(c) If an affected facility controlled by a solvent recovery system uses only solvent-borne ink systems, the owner or operator may choose to determine compliance on a direct mass or a density-corrected liquid volume basis. Except as provided in paragraphs (d), (e), (f), and (g) of this section, compliance is determined as follows:

(1) On a direct mass basis, compliance is determined according to paragraph (b) of this section, except that the water term, M_v, does not apply.

(2) On a density-corrected liquid volume basis, compliance is determined by the following procedures:

(i) A base temperature corresponding to that for the largest individual amount of VOC solvent used or recovered from the affected facility, or other reference temperature, is chosen by the owner or operator.

(ii) The corrected liquid volume of VOC in the raw inks and related coatings used is determined by the following equation:

$$(L_o)_a = \sum_{i=1}^{k} \frac{(M_{ci})_a (W_{oi})_a}{D_B} + \sum_{i=1}^{m} \frac{(L_{ci})_a (D_{ci})_a (W_{oi})_a}{D_B} + \sum_{i=1}^{n} \frac{(L_{ci})_a (V_{oi})_a (D_{oi})_a}{D_B}$$

where:

k is the total number of raw inks and related coatings measured as used in direct mass quantities with different amounts of VOC content.

m is the total number of raw inks and related coatings measured as used by volume with different amounts of VOC content or different densities.

n is the total number of raw inks and related coatings measured as used by volume with different amounts of VOC content or different VOC solvent densities.

(iii) The total corrected liquid volume of VOC used is determined by the following equation:

$$(L_t)_a = (L_o)_a + \sum_{i=1}^{m} \frac{(L_{di})_a (D_{di})_a}{D_B} + \frac{(M_d)_a}{D_B} + \sum_{i=1}^{n} \frac{(L_{gi})_a (D_{gi})_a}{D_B} + \frac{(M_g)_a}{D_B}$$

where “m” and “n” are the respective total numbers of VOC dilution and cleaning solvents measured as used by volume with different densities.

(iv) The total corrected liquid volume of VOC solvent recovered is determined by the following equation:

$$(L_r)_a = \frac{(M_m)_a}{D_B} + \sum_{i=1}^{k} \frac{(L_{mi})_a (D_{mi})_a}{D_B}$$

where “k” is the total number of VOC solvents, miscellaneous solvent-borne waste inks, and waste VOC solvents measured as recovered by volume with different densities.

(v) The average VOC emission percentage for the affected facility is determined by the following equation:

$$P_a = \left[\frac{(L_t)_a - (L_r)_a}{(L_t)_a} \right] x100$$

(d) If two or more affected facilities are controlled by the same solvent recovery system, compliance is determined by the procedures specified in paragraph (b) or (c) of this section, whichever applies, except that $(L_t)_a$and $(L_r)_a$,$(M_t)_a$,$(M_r)_a$,and $(M_v)_a$,are the collective amounts of VOC solvent and water corresponding to all the affected facilities controlled by that solvent recovery system. The average VOC emission percentage for each of the affected facilities controlled by that same solvent recovery system is assumed to be equal.

(e) Except as provided under paragraph (f) of this section, if an existing facility (or facilities) and an affected facility (or facilities) are controlled in common by the same solvent recovery system, the owner or operator shall determine compliance by conducting a separate emission test on the existing facility (or facilities) and then conducting a performance test on the combined facilities as follows:

(1) Before the initial startup of the affected facility (or facilities) and at any other time as requested by the Administrator, the owner or operator shall conduct emission test(s) on the existing facility (or facilities) controlled by the subject solvent recovery system. The solvent recovery system must handle VOC emissions from only the subject existing facility (or facilities), not from affected facilities, during the emission test.

(2) During the emission test, the affected facilities are subject to the standard stated in §60.432.

(3) The emission test is conducted over a 30 consecutive calendar day averaging period according to the conditions stipulated in paragraphs (a)(1) through (a)(5) of this section, except that the conditions pertain to only existing facilities instead of affected facilities.

(4) The owner or operator of the existing facility (or facilities) shall provide the Administrator at least 30 days prior notice of the emission test to afford the Administrator the opportunity to have an observer present.

(5) The emission percentage for the existing facility (or facilities) during the emission test is determined by one of the following procedures:

(i) If the existing facility (or facilities) uses a combination of waterborne and solvent-borne ink systems, the average VOC emission percentage must be determined on a direct mass basis according to paragraph (b) or (d) of this section, whichever applies, with the following equation:

$$P_e = \left[\frac{(M_t)_e - (M_r)_e}{(M_t)_e + (M_v)_e} \right] x100$$

where the water and VOC solvent amounts pertain to only existing facilities.

(ii) If the existing facility (or facilities) uses only solvent-borne ink systems, the owner or operator may choose to determine the emission percentage either on a direct mass basis or a density-corrected liquid volume basis according to paragraph (c) or (d) of this section, whichever applies. On a direct mass basis, the average VOC emission percentage is determined by the equation presented in article (i) of this

paragraph. On a density-corrected liquid volume basis, the average VOC emission percentage is determined by the following equation:

$$P_e = \left[\frac{(L_t)_e - (L_r)_e}{(L_t)_e} \right] x100$$

where the VOC solvent amounts pertain to only existing facilities.

(6) The owner or operator of the existing facility (or facilities) shall furnish the Administrator a written report of the results of the emission test.

(7) After completion of the separate emission test on the existing facility (or facilities), the owner or operator shall conduct performance test(s) on the combined facilities with the solvent recovery system handling VOC emissions from both the existing and affected facilities.

(8) During performance test(s), the emission percentage for the existing facility (or facilities), $P_{e,}$is assumed to be equal to that determined in the latest emission test. The administrator may request additional emission tests if any physical or operational changes occur to any of the subject existing facilities.

(9) The emission percentage for the affected facility (or facilities) during performance test(s) with both existing and affected facilities connected to the solvent recovery system is determined by one of the following procedures:

(i) If any of the combined facilities uses both waterborne and solvent-borne ink systems, the average VOC emission percentage must be determined on a direct mass basis according to paragraph (b) or (d) of this section, whichever applies, with the following equation:

$$P_a = \left[\frac{(M_t)_b - (M_r)_b - \left(\frac{P_e}{100} \right) \left[(M_t)_e + (M_v)_e \right]}{(M_t)_a + (M_v)_a} \right] \text{x } 100$$

where $(M_t)_b$and $(M_r)_b$are the collective VOC solvent amounts pertaining to all the combined facilities.

(ii) If all of the combined facilities use only solvent-borne ink systems, the owner or operator may choose to determine performance of the affected facility (or facilities) either on a direct mass basis or a density-corrected liquid volume basis according to paragraph (c) or (d) of this section, whichever applies. On a direct mass basis, the average VOC emission percentage is determined by the equation presented in article (i) of this paragraph. On a density-corrected liquid volume basis, the average VOC emission percentage is determined by the following equation:

$$P_a = \left[\frac{(L_t)_b - (L_r)_b - (L_t)_e \left(\frac{P_e}{100} \right)}{(L_t)_a} \right] \text{x } 100$$

where $(L_t)_b$and $(L_r)_b$are the collective VOC solvent amounts pertaining to all the combined facilities.

(f) The owner or operator may choose to show compliance of the combined performance of existing and affected facilities controlled in common by the same solvent recovery system. A separate emission test for existing facilities is not required for this option. The combined performance is determined by one of the following procedures:

(1) If any of the combined facilities uses both waterborne and solvent-borne ink systems, the combined average VOC emission percentage must be determined on a direct mass basis according to paragraph (b) or (d) of this section, whichever applies, with the following equation:

$$P_b = \left[\frac{(M_t)_b - (M_r)_b}{(M_t)_b + (M_v)_b}\right] \times 100$$

(2) If all of the combined facilities use only solvent-borne ink systems, the owner or operator may choose to determine performance either on a direct mass basis or a density-corrected liquid volume basis according to paragraph (c) or (d) of this section, whichever applies. On a direct mass basis, the average VOC emission percentage is determined by the equation presented in article (i) of this paragraph. On a density-corrected liquid volume basis, the average VOC emission percentage is determined by the following equation:

$$P_b = \left[\frac{(L_t)_b - (L_r)_b}{(L_t)_b}\right] \text{x } 100$$

(g) If all existing and affected facilities located within the same plant boundary use waterborne ink systems or solvent-borne ink systems with solvent recovery systems, the owner or operator may choose to show compliance on a plantwide basis for all the existing and affected facilities together. No separate emission tests on existing facilities and no temporary segregated liquid measurement procedures for affected facilities are required for this option. The plantwide performance is determined by one of the following procedures:

(1) If any of the facilities use waterborne ink systems, the total plant average VOC emission percentage must be determined on a direct mass basis according to paragraph (b) of this section with the following equation:

$$P_f = \left[\frac{(M_t)_f - (M_r)_a - (M_r)_e - (M_r)_b}{(M_t)_f + (M_v)f}\right] \text{x } 100$$

Where $(M_t)_f$and $(M_v)_f$are the collective VOC solvent and water amounts used at all the subject plant facilities during the performance test.

(2) If all of the plant facilities use only solvent-borne ink systems, the owner or operator may choose to determine performance either on a direct mass basis or a density-corrected liquid volume basis according to paragraph (c) of this section. On a direct mass basis, the total plant average VOC emission percentage is determined by the equation presented in article (i) of this paragraph. On a density-corrected liquid volume basis, the total plant average VOC emission percentage is determined by the following equation:

$$P_f = \left[\frac{(L_t)_f - (L_r)_a - (L_r)_e - (L_r)_b}{(L_t)_f}\right] \text{x } 100$$

Where $(L_t)_f$is the collective VOC solvent amount used at all the subject plant facilities during the performance test.

[47 FR 50649, Nov. 8, 1982, as amended at 65 FR 61761, Oct. 17, 2000]

§ 60.434 Monitoring of operations and recordkeeping.

(a) After completion of the performance test required under §60.8, the owner or operator of any affected facility using waterborne ink systems or solvent-borne ink systems with solvent recovery systems shall record the amount of solvent and water used, solvent recovered, and estimated emission percentage for each performance averaging period and shall maintain these records for 2 years. The emission percentage is estimated as follows:

(1) The performance averaging period for monitoring of proper operation and maintenance is a calendar month or 4 consecutive weeks, at the option of the owner or operator.

(2) If affected facilities share the same raw ink storage/handling system with existing facilities, solvent and water used, solvent recovered, and emission percentages for the combined facilities may be documented. Separate emission percentages for only the affected facilities are not required in this case. The combined emission percentage is compared to the overall average for the existing and affected facilities' emission percentage determined during the most recent performance test.

(3) Except as provided in article (4) of this paragraph, temperatures and liquid densities determined during the most recent performance test are used to calculate corrected volumes and mass quantities.

(4) The owner or operator may choose to measure temperatures for determination of actual liquid densities during each performance averaging period. A different base temperature may be used for each performance averaging period if desired by the owner or operator.

(5) The emission percentage is calculated according to the procedures under §60.433 (b) through (g), whichever applies, or by a comparable calculation which compares the total solvent recovered to the total solvent used at the affected facility.

§ 60.435 Test methods and procedures.

(a) The owner or operator of any affected facility using solvent-borne ink systems shall determine the VOC content of the raw inks and related coatings used at the affected facility by:

(1) Analysis using Method 24A of routine weekly samples of raw ink and related coatings in each respective storage tank; or

(2) Analysis using Method 24A of samples of each shipment of all purchased raw inks and related coatings; or

(3) Determination of the VOC content from the formulation data supplied by the ink manufacturer with each shipment of raw inks and related coatings used.

(b) The owner or operator of any affected facility using solvent-borne ink systems shall use the results of verification analyses by Method 24A to determine compliance when discrepancies with ink manufacturers' formulation data occur.

(c) The owner or operator of any affected facility using waterborne ink systems shall determine the VOC and water content of raw inks and related coatings used at the affected facility by:

(1) Determination of the VOC and water content from the formulation data supplied by the ink manufacturer with each shipment of purchased raw inks and related coatings used; or

(2) Analysis of samples of each shipment of purchased raw inks and related coatings using a test method approved by the Administrator in accordance with §60.8(b).

(d) The owner or operator of any affected facility shall determine the density of raw inks, related coatings, and VOC solvents by:

(1) Making a total of three determinations for each liquid sample at specified temperatures using the procedure outlined in ASTM D1475–60, 80, or 90, which is incorporated by reference. It is available from the American Society of Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* This incorporation by reference was approved by the Director of the Federal Register on November 8, 1982. This material is incorporated as it exists on the date of approval and a notice of any change in these materials will be published in theFederal Register.The temperature and density is recorded as the arithmetic average of the three determinations; or

(2) Using literature values, at specified temperatures, acceptable to the Administrator.

(e) If compliance is determined according to §60.433 (e), (f), or (g), the existing as well as affected facilities are subject to the requirements of paragraphs (a) through (d) of this section.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**RR Donnelly**
Source Location:	**611 W. Mill St., Angola, IN 46703**
County:	**Steuben**
SIC Code:	**2759, 2752, 2672**
Operation Permit No.:	**F151-26435-00034**
Permit Reviewer:	**Summer Keown**

On December 30, 2008, the Office of Air Quality (OAQ) had a notice published in the Herald Republican, Angola, Indiana, stating that Moore Wallace North America, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to continue to operate their stationary pressure sensitive and bar-coded products manufacturing plant using lithographic and flexographic printing to produce business forms and labels. The notice also stated that the OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On January 7, 2009, RR Donnelley submitted comments to IDEM, OAQ on the draft FESOP.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Press #10 and Press #34 now exhaust to stack S1.

Response to Comment 1:

The permit has been revised to reflect these changes.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

. . .

(f) One (1) flexographic printing press, identified as Press # 10, constructed in 1994, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack ~~# 22~~ **S1**;

. . .

(h) One (1) flexographic printing press, identified as Press # 34, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10)

inches, exhausting to stack ~~# 31~~ **S1**;

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

. . .

(f) One (1) flexographic printing press, identified as Press # 10, constructed in 1994, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack ~~# 22~~ **S1**;

. . .

(h) One (1) flexographic printing press, identified as Press # 34, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack ~~# 31~~ **S1**;

Comment 2:

The applicant requests to change the name of the source from Moore Wallace North America, Inc. to RR Donnelley.

Response to Comment 2:

All references to the source name have been changed to RR Donnelley throughout the permit.

IDEM Contact

(a) Questions regarding this proposed FESOP can be directed to Summer Keown 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) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.

(b) A copy of the permit 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

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	**Moore Wallace North America, Inc.**
Source Location:	**611 W. Mill St., Angola, IN 46703**
County:	**Steuben**
SIC Code:	**2759, 2752, 2672**
Permit Renewal No.:	**F151-26435-00034**
Permit Reviewer:	**Summer Keown**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Moore Wallace North America, Inc. relating to the operation of a stationary pressure sensitive and bar-coded products manufacturing plant using lithographic and flexographic printing to produce business forms and labels.

History

On April 21, 2008, Moore Wallace North America, Inc. submitted an application to the OAQ requesting to renew its operating permit No. F151-18281-00034, issued on April 30, 2004. Moore Wallace North America, Inc. was issued a FESOP on April 30, 2004.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) lithographic printing press, identified as Press # 49, constructed in 1986, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches;

(b) One (1) lithographic printing press, identified as Press # 50, constructed in 1985, with a maximum line speed of fifteen hundred (1500) feet per minute and a printing width of thirty-two (32) inches, exhausting to stacks # 3 and #4;

(c) One (1) lithographic printing press, identified as Press # 71, constructed in 2000, with a maximum line speed of twelve hundred (1200) feet per minute and a printing width of twenty (20) inches, exhausting to stack # 5;

(d) One (1) flexographic printing press, identified as Press # 4, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 73 and # 74;

(e) One (1) flexographic printing press, identified as Press # 9, constructed in 1991, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 23;

(f) One (1) flexographic printing press, identified as Press # 10, constructed in 1994, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack # 22;

(g) One (1) flexographic printing press, identified as Press # 11, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 23;

(h) One (1) flexographic printing press, identified as Press # 34, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack # 31;

(i) One (1) flexographic printing press, identified as Press # 35, constructed in 1996, with a maximum line speed of five hundred (500) feet per minute and a printing width of ten (10) inches, exhausting to stack # 21;

(j) One (1) flexographic printing press, identified as Press # 48, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(k) One (1) flexographic printing press, identified as Press # 52, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 21;

(l) One (1) flexographic printing press, identified as Press # 53, constructed in 1986, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 16 and # 21;

(m) One (1) flexographic printing press, identified as Press # 58, constructed in 1988, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stack # 22;

(n) One (1) flexographic printing press, identified as Press # 62, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 12 and # 16;

(o) One (1) flexographic printing press, identified as Press # 63, constructed in 1990, with a maximum line speed of five hundred (500) feet per minute and a printing width of eighteen (18) inches, exhausting to stack # 22;

(p) One (1) flexographic printing press, identified as Press # 66, constructed in 2004, with a maximum line speed of seven hundred and fifty (750) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 75, # 76 and # 77;

(q) One (1) flexographic printing press, identified as Press # 67, constructed in 1997, with a maximum line speed of five hundred (500) feet per minute and a printing width of sixteen (16) inches, exhausting to stacks # 8, # 9 and # 10;

(r) One (1) coater, identified as C1, constructed in 1994, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 59;

(s) One (1) coater, identified as C2, constructed in 2000, with a maximum line speed of two hundred and fifty (250) feet per minute and a printing width of thirty-two (32) inches, exhausting to stack # 60; and

(t) One (1) Linerless Flexographic Printing Press, identified as Press # 68, constructed in 2005, with a maximum line speed of seven hundred and fifty (750) feet per minute and a maximum printing width of twenty (20) inches and exhausting to three (3) stacks , identified as 78, 79 and 80.

Insignificant Activities

Activities emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC:

(a) Three (3) tamaracks;
(b) Plate wash unit;

(c) Seven (7) collators;
(d) Two (2) parts cleaners, installed in 1982 and 1991; and
(e) One (1) automated plate making machine, installed in 2008.

Existing Approvals

Since the issuance of the FESOP No. 151-18281-00034 on April 30, 2004, the source has constructed or has been operating under the following approvals as well:

(a) Minor Permit Revision No. 151-20451-00034, issued on February 25, 2005;

(b) Administrative Amendment No. 151-21969-00034, issued on November 15, 2005;

(c) Administrative Amendment No. 151-22615-00034, issued on February 14, 2006;

(d) Administrative Amendment No. 151-24197-00034, issued on February 28, 2007; and

(e) Administrative Amendment No. 151-26237-00034, issued on March 31, 2008.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Steuben County

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, 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	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Steuben 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
Steuben County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

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

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

Unrestricted Potential Emissions

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

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their VOC emissions to less than Title V levels, therefore the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

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

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)								
Process/ Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_x**	**Single HAPs**	**Total HAPs**
Lithographic Presses	--	--	--	--	< 24.0	--	--	0.83	0.99
Flexographic Presses	--	--	--	--		--	--	0.68	0.78
Coaters	--	--	--	--		--	--	0.62	1.36
Collators	negl.	negl.	negl.	--		--	--	negl.	negl.
Insignificant Activities	negl.	negl.	negl.	--	0.51	--	--	negl.	negl.
Total Emissions	**0**	**0**	**0**	**0**	**<25.0**	**0**	**0**	**0.83**	**3.13**

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

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

Federal Rule Applicability

The following federal rules are applicable to the source:

(a) The lithographic printing presses, the flexographic printing presses, and the coaters are subject to the record-keeping requirements of the New Source Performance Standard for Pressure Sensitive Tape and Labeling Coating Operations (40 CFR 60, Subpart RR), which is incorporated by reference as 326 IAC 12.

Nonapplicable portions of the NSPS will not be included in the permit. The three (3) lithographic printing presses, the fifteen (15) flexographic printing presses, and the two (2) coaters are subject to the following portions of Subpart RR:

(1) 40 CFR 60.445(a)
(2) 40 CFR 60.445(h)

(b) The requirements of the New Source Performance Standard for the Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ, are not included in this permit for the lithographic and flexographic printing presses and coaters. This standard applies to each publication rotogravure printing press that commenced construction, modification or reconstruction after October 28, 1980. The three (3) lithographic printing presses, the fifteen (15) flexographic printing presses, and the two (2) coaters are not subject to the NSPS, because they are not rotogravure printing presses.

(c) The requirements of the New Source Performance Standard for Flexible Vinyl and Urethane Coating and Printing, 40 CFR 60, Subpart FFF, are not included in this permit for the lithographic and flexographic printing presses and coaters. This standard applies to each publication rotogravure printing press used to print or coat flexible vinyl or urethane products that commenced construction, modification or reconstruction after January 18, 1983. The four (4) lithographic printing presses and the fourteen (14)

flexographic printing presses are not subject to the NSPS, because they are not rotogravure printing presses.

(d) The requirements of the New Source Performance Standard for Polymeric Coating of Supporting Substrates Facilities, 40 CFR 60, Subpart VVV, are not included in this permit for the lithographic and flexographic printing presses and coaters. This standard applies to each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates, that commenced construction, modification or reconstruction after April 30, 1987. The coating lines at the source are not used to prepare coatings for the polymeric coating of supporting substrates. Therefore, the requirements of 40 CFR 60, Subpart VVV, are not applicable.

(e) There are no other New Source Performance Standards (40 CFR Part 60) included in this permit renewal.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK are not included in the permit for the lithographic and flexographic printing presses and coaters. The printing presses at this source are not subject to the NESHAP, because they are not publication, product and packaging rotogravure printing presses, or wideweb flexographic printing presses, and they are not major for single HAP and combined HAPs.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating Industry, 40 CFR 63, Subpart JJJJ are not included in the permit for the lithographic and flexographic printing presses and coaters. This standard applies to major source of hazardous air pollutants (HAPs), at which coating of folding paper board boxes, packing paper, label, medical tape, foil, commercial printing, etc. takes place. The presses, located at the source are not subject to this NESHAP, because the source is not major for single HAP and combined HAPs and web coating in lithography is specifically exempted by § 63.3300(c).

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, 40 CFR 63, Subpart T, are not included in the permit for the parts cleaning operations. The parts cleaners do not use any halogenated solvent cleaners.

(i) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration, PSD)

This source, constructed in 1955, before the applicability date of August 7, 1980, is not considered a major source because it is not one of the 28 listed source categories, no major modifications were done and the source-wide unrestricted potential to emit for each of PM, PM-10, PM-2.5, VOC, SO_2, NOx and CO has always remained at less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to this source.

326 IAC 2-6 (Emission Reporting)

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

326 IAC 2-8-4 (FESOP)

The source has agreed to limit VOC usage for the entire source, including inks, coatings, adhesives, release agents, additives, reducers and solvents to less than 25 tons per year to avoid being subject to 326 IAC 8-5-5.

Compliance with the VOC usage limit for the lithographic printing, flexographic printing, coating operations, and collators, combined with the potential VOC emissions from the insignificant activities shall limit the total potential VOC emissions from the source to less than one hundred (100) tons per year and make 326 IAC 2-7 (Part 70) not applicable.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 8-5-5 (Graphic Arts Operations)

326 IAC 8-5-5 applies to flexographic printing presses located at sources constructed after November 1, 1980, that have source-wide emissions of twenty-five (25) tons of VOC or more per year. The source was constructed after November 1, 1980 and has the total potential to emit of greater than twenty-five tons per year. Therefore, the fifteen (15) flexographic printing presses, identified as Press #4, Press #9, Press #10, Press #11, Press #34, Press #35, Press #48, Press #52, Press #53, Press #58, Press #62, Press #63, Press #66, Press #67, and Press #68, would be subject to this rule.

However, the source has agreed to limit the emission of VOC from the flexographic printing presses, the lithographic printing presses, coaters, and collators to less than 24.0 tons per year. Compliance with this limit, combined with the potential to emit VOC from the insignificant activities, will limit total VOC from the entire source to less than twenty-five (25) tons per year. The source has provided documentation to IDEM to show that their actual emissions from the entire source have always been less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-5-5 are not applicable to any emission units at the source.

State Rule Applicability – Printing Presses and Coaters

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the lithographic printing presses, the flexographic printing presses, and the coaters will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

326 IAC 8-1-6 applies to new facilities constructed after January 1, 1980 that have potential emissions of twenty-five (25) tons or more per year. The flexographic printing presses, the lithographic presses, and the coaters have potential emissions of less than twenty-five (25) tons per year, each. Therefore, the flexographic presses, lithographic presses, and coaters are not subject to this rule.

326 IAC 8-2-5 (Paper Coating Operations)

Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the volatile organic compound (VOC) content of coatings applied to labels of any substrate, or pressure sensitive tapes, or paper, plastic or metal foil by means of web coating shall be limited to 2.9 pounds VOC per gallon of coating less water delivered to the applicator. Records shall be maintained to document the VOC content of each coating material and solvent used.

(a) The Linerless Flexographic Printing Press, identified as Press #68, is subject to 326 IAC 8-2-5 because it has the potential to emit greater than twenty-five (25) tons per year of VOC.

(b) The remaining flexographic printing presses, identified as Press #4, Press #9, Press #10, Press #11, Press #34, Press #35, Press #48, Press #52, Press #53, Press #58, Press #62, Press #63, Press #66, and Press #67, and the two (2) coaters, identified as C1 and C2, have the potential to emit less than twenty-five (25) tons per year of VOC, each. Therefore, these facilities are not subject to 326 IAC 8-2-5.

State Rule Applicability -- Insignificant Activities

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

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

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)),

then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaning facility construction of which commenced after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on April 21, 2008.

Conclusion

The operation of this stationary pressure sensitive and bar-coded products manufacturing plant shall be subject to the conditions of the attached FESOP Renewal No. F151-26435-00034.

Appendix A: Emissions Calculations
Summary

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Units	PM	PM2.5*	PM10	SO_2	NOx	VOC	CO	Single HAP	Total HAPs
Lithographic Presses	0.00	0.00	0.00	0.00	0.00	45.03	0.00	0.83 (ethylene glycol)	0.99
Flexographic Presses	0.00	0.00	0.00	0.00	0.00	222.01	0.00	0.68	0.78
Coaters	0.00	0.00	0.00	0.00	0.00	19.17	0.00	0.62 (xylene)	1.36
Collators	negl.	negl.	negl.	0.00	0.00	3.40	0.00	negl.	negl.
Insignificant Activities	0.00	0.00	0.00	0.00	0.00	0.51	0.00	negl.	negl.
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**290.12**	**0.00**	**0.83 (ethylene glycol)**	**3.13**

Controlled Potential Emissions (tons/year)

Emissions Units	PM	PM2.5*	PM10	SO_2	NOx	VOC	CO	Single HAP	Total HAPs
Lithographic Presses	0.00	0.00	0.00	0.00	0.00	<24.0	0.00	0.83 (ethylene glycol)	0.99
Flexographic Presses	0.00	0.00	0.00	0.00	0.00		0.00	0.68	0.78
Coaters	0.00	0.00	0.00	0.00	0.00		0.00	0.62 (xylene)	1.36
Collators	negl.	negl.	negl.	0.00	0.00		0.00	negl.	negl.
Insignificant Activities	0.00	0.00	0.00	0.00	0.00	0.51	0.00	negl.	negl.
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**<25**	**0.00**	**0.83 (ethylene glycol)**	**3.13**

*PM2.5 emissions are assumed to be equal to PM10 emissions.

Appendix A: Emissions Calculations
VOC From Printing Press Operations
Lithographic Presses

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

THROUGHPUT

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	PTE VOC (TPY)
Press #49	1500	32	302746	18.01
Press#50	1500	32	302746	18.01
Press#71	1200	20	151373	9.01
		Total Litho:	756864	45.03

INK VOCS

Ink Name Press Id	Emission Factor (lbs VOC /MMin^2)	Maximum % Operation Time	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
Inks	0.021	100.00%	756864	7.95
Coatings	0.067	100.00%	756864	25.35
Additives	0.025	100.00%	756864	9.46
Solvents	0.006	100.00%	756864	2.27

Total VOC Emissions = **45.03** **Ton/yr**

METHODOLOGY

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year
VOC = Emission Factor pounds VOC per MMin^2 * Throughput * Tons per 2000 pounds = Tons per Year
NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
Emission Factor (lbs VOC/MMin^2) = Maximum Coverage pounds per MMin^2 * Weight % volatiles * Flash off %

Appendix A: Emissions Calculations
VOC From Printing Press Operations
Flexographic Presses

Company Name: Moore Pressure Sensitive Systems
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

THROUGHPUT

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	PTE VOC (TPY)
Press #4	750	16	75686	20.81
Press #9	500	18	56765	15.61
Press #10	500	10	31536	8.67
Press #11	500	16	50458	13.88
Press #34	500	10	31536	8.67
Press #35	500	10	31536	8.67
Press #48	500	16	50458	13.88
Press #52	500	16	50458	13.88
Press #53	500	16	50458	13.88
Press #58	500	16	50458	13.88
Press #62	500	16	50458	13.88
Press #63	500	18	56765	15.61
Press #66	750	16	75686	20.81
Press #67	500	16	50458	13.88
Press #68	750	20	94608	26.02
		Total Flexo:	807322	222.01

INK VOCS

Ink Name Press Id	Emission Factor (lbs VOC/MMin^2)	Maximum % Operation Time	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
Inks	0.128	100.00%	807322	51.67
Coatings	0.092	100.00%	807322	37.14
Additives	0.125	100.00%	807322	50.46
Reducers	0.013	100.00%	807322	5.25
Solvents	0.192	100.00%	807322	77.50

Total VOC Emissions =	**222.01**	**Ton/yr**

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year
VOC = Emission Factor pounds VOC per MMin^2 * Throughput * Tons per 2000 pounds = Tons per Year
NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
Emission Factor (lbs VOC/MMin^2) = Maximum Coverage pounds per MMin^2 * Weight % volatiles * Flash off %

Appendix A: Emissions Calculations
VOC From Printing Press Operations
Coaters

Company Name: Moore Pressure Sensitive Systems
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

THROUGHPUT

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	PTE VOC (TPY)
C1	250	32	50458	9.59
C2	250	32	50458	9.59
		Total Coater:	100915	19.17

C1 and C2

INK VOCS

Ink Name Press Id	Emission Factor (lbs VOC/MMin^2)	Maximum % Operation Time	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
Adhesive	0.148	100.00%	100915	7.47
Release Agent	0.025	100.00%	100915	1.26
Additive	0.009	100.00%	100915	0.45
Reducer	0.198	100.00%	100915	9.99

Total VOC Emissions = **19.17** **Ton/yr**

METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year
VOC = Emission Factor pounds VOC per MMin^2 * Throughput * Tons per 2000 pounds = Tons per Year
NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
Emission Factor (lbs VOC/MMin^2) = Maximum Coverage pounds per MMin^2 * Weight % volatiles * Flash off %

Appendix A: Potential Emissions Calculations
HAPs From Lithographic Printing Presses

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

Lithographic Printing Presses - All Lithographic Presses Combined

HAP	CAS #	% split	Total HAPs (lbs/year)	Total HAP (tons/year)
vinyl acetate	108-05-4	0	0.00	0.00
ethyl benzene	100-41-4	0	0.00	0.00
c.i. basic red 1	989-38-8	0.5	18.53	0.01
ethylene glycol	107-21-1	63	2,334.34	1.17
toluene	108-88-3	0.06	2.22	0.00
xylene	1330-20-7	0	0.00	0.00
naphthalene	91-20-3	0	0.00	0.00
hydroquinone	123-31-9	9.8	363.12	0.18
acrylic acid	79-10-7	0.9	33.35	0.02
benzene	71-43-2	0	0.00	0.00
other/unk	n/a	0	0.00	0.00
cyclohexane	110-82-7	2.1	77.81	0.04
formaldehyde	50-00-0	0	0.00	0.00

Unit	Percentage of surface coating materials processed through each unit
49	28.6
50	28.6
71	14.3

Lithographic Printing Presses **Press ID**

HAP	49	50	71	Total HAPs
vinyl acetate	0.00	0.00	0.00	0.00
ethyl benzene	0.00	0.00	0.00	0.00
c.i. basic red 1	0.00	0.00	0.00	0.00
ethylene glycol	0.33	0.33	0.17	**0.83**
toluene	0.00	0.00	0.00	0.00
xylene	0.00	0.00	0.00	0.00
naphthalene	0.00	0.00	0.00	0.00
hydroquinone	0.05	0.05	0.03	0.13
acrylic acid	0.00	0.00	0.00	0.00
benzene	0.00	0.00	0.00	0.00
other/unk	0.00	0.00	0.00	0.00
cyclohexane	0.01	0.01	0.01	0.03
formaldehyde	0.00	0.00	0.00	0.00
tons/year	0.39	0.39	0.21	**0.99**

Emissions calculations were derived from MSDS sheets on file and submitted by Moore Wallace North America, Inc.

Appendix A: Potential Emissions Calculations
HAPs From Flexographic Printing Presses

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

Flexographic Printing Presses

Unit	Percentage of surface coating materials processed through each unit	% split	HAP (lbs)
9	8.0%	0	0.0
10	4.4%	0	0.0
11	7.1%	74.9	6,725.2
34	4.8%	0.13	11.7
35	4.8%	0.005	0.4
48	7.1%	0.01	0.9
52	7.1%	0	0.0
53	7.1%	3	269.4
58	7.1%	0	0.0
62	7.1%	0	0.0
63	8.0%	0	0.0
67	7.1%	22	1,975.4
		0	0.0
		0	0.0
		lbs/year	8,983.0

Flexographic Printing Press	**Press ID**														
	4	9	10	11	34	35	48	52	53	58	62	63	66	67	Total
vinyl acetate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ethyl benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c.i. basic red 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ethylene glyco	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
toluene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
xylene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
naphthalene	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10
hydroquinone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
acrylic acid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other/unk	0.08	0.08	0.04	0.07	0.05	0.05	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.07	**0.68**
cyclohexane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
formaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.09	0.09	0.05	0.08	0.06	0.06	0.1	0.1	0.08	0.08	0.08	0.09	0.09	0.08	**0.78**

Emissions calculations were derived from MSDS sheets on file and submitted by Moore Wallace North America, Inc.

Appendix A: Potential Emissions Calculations
HAPs From Coaters

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 West Mill Street, Angola, IN 46703
FESOP: F151-26435-00034
Reviewer: Summer Keown
Date: October 1, 2008

Coaters	Coater ID				**Coaters**	
	C-1	C-2	C-3	**Total**	% split	HAP (lbs)
vinyl acetate	0.00	0.01	0.00	0.01	1	27.2
ethyl benzene	0.19	0.05	0.00	0.24	17.1	465.4
c.i. basic red 1	0.00	0.00	0.00	0.00	0	0.0
ethylene glycol	0.00	0.00	0.00	0.00	0	0.0
toluene	0.21	0.05	0.15	0.41	0	0.0
xylene	0.50	0.12	0.00	**0.62**	30.5	830.2
naphthalene	0.00	0.00	0.00	0.00	45.6	1,241.2
hydroquinone	0.00	0.00	0.00	0.00	0	0.0
acrylic acid	0.00	0.00	0.00	0.00	0	0.0
benzene	0.00	0.00	0.00	0.00	0	0.0
other/unk	0.00	0.00	0.00	0.00	0.02	0.5
cyclohexane	0.00	0.00	0.00	0.00	0	0.0
formaldehyde	0.06	0.02	0.00	0.08	0	0.0
tons/year	0.96	0.25	0.15	**1.36**	5.9	160.6
					lbs/year	2,725.1

Emissions calculations were derived from MSDS sheets on file and submitted by Moore Wallace North America, Inc.

Appendix A: Emissions Calculations
Additional Insignificant Activities

Company Name: Moore Wallace North America, Inc.
Address City IN Zip: 611 W. Mill Street, Angola, IN 46703
strative Amendment No.: 151-26237-00034
Reviewer: Summer Keown
Date: October 1, 2008

Emissions Unit	Potential VOC Emissions (lbs/year)	Potential Emissions VOC (tons/year)
Tamaracks (3 total)	850	0.4
Collators (7 total)	6,776	3.4
Plate Wash Unit	200	0.1
Parts Cleaner - Citrus	0	0.0
Parts Cleaner - Solvent	10	0.0
Laster auto-platemaker	0	0.0
Total	7836	3.91
Total - Collators	1,060	0.51

Calculations provided by applicant.