



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: May 27, 2005
RE: Courier Kendallville, Inc. / SPR 113-20307-00021
FROM: Paul Dubenetzky
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, Room 1049, 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.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
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100 North Senate Avenue
Indianapolis, Indiana 46204
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Ms. Sybella Wilder
Courier Kendallville, Inc.
2500 Marion Drive
Kendallville, Indiana 46755

May 27, 2005

Re: 113-20307-00021
Second Significant Revision to
FESOP 113-12093-00021

Dear Ms. Wilder:

Courier Kendallville, Inc. was issued a permit on October 13, 2000 for a commercial printing source. A letter requesting changes to this permit was received on January 10, 2005. Pursuant to the provisions of 326 IAC 2-8-11.1 a Significant Permit Revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of the construction and operation of an additional heat set web offset lithographic printing press, identified as Lithoman 2, and a regenerative thermal oxidizer, identified as Cleanswitch 2.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised FESOP, with all revisions and amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Edward A. Longenberger, c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
EAL/MES

cc: File - Noble County
U.S. EPA, Region V
Noble County Health Department
Northern Regional Office
Air Compliance Section Inspector – Doyle Houser
Compliance Branch
Administrative and Development Section
Technical Support and Modeling - Michele Boner



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Thomas W. Easterly
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**FEDERALLY ENFORCEABLE STATE
 OPERATING PERMIT (FESOP)
 OFFICE OF AIR QUALITY**

**Courier Kendallville, Inc.
 2500 Marion Drive
 Kendallville, Indiana 46755**

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

This permit is issued 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.

Operation Permit No.: F113-12093-00021	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 13, 2000 Expiration Date: October 13, 2005
First Administrative Amendment No. 113-16645-00021, issued on November 4, 2002 First Minor Permit Revision No. 113-16834-00021, issued on May 12, 2003 First Significant Permit Revision No. 113-17840-00021, issued on January 6, 2004	
Second Significant Permit Revision No. 113-20307-00021	Pages Affected: 5, 6, 27 - 35, 41
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 27, 2005

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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 commercial printing plant that manufactures adhesive bound and saddlewire bound books and performs the following processes: printing, drying, binding and finishing.

Authorized individual:	Sybella Wilder
Source Address:	2500 Marion Drive, Kendallville, Indiana 46755
Mailing Address:	2500 Marion Drive, Kendallville, Indiana 46755
Phone Number:	(260) 347-3044
SIC Code:	2752
Source Location Status:	Noble
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

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) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 16, with a maximum line speed of 1265 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 16 Upper Dryer and Hantscho Mark 16 Lower Dryer, each with a maximum heat input rate of 2.93 million British thermal units per hour, exhausting to one (1) stack, identified as 6;
- (b) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as M850, with a maximum line speed of 1600 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.4 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (c) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 6, with a maximum line speed of 950 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 6 Upper Dryer and Hantscho Mark 6 Lower Dryer, each with a maximum heat input rate of 2.56 million British thermal units per hour, exhausting to one (1) stack, identified as 2;
- (d) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units and the addition of another four (4) printing units), identified as M130, with a maximum line speed of 1264 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2)

stacks, identified as Oxy 1 or Oxy 2;

- (e) One (1) nonheat set sheetfed offset printing press (consisting of four (4) printing units), identified as Heidelberg Sheetfed Press, with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches;
- (f) One (1) sheetfed UV Coater with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches; and
- (g) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman 2, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman 2 dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (h) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (i) One (1) regenerative thermal oxidizer, identified as Cleanswitch, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 2. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.
- (j) One (1) regenerative thermal oxidizer, identified as Cleanswitch 2, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.

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, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
 - (1) Six (6) natural gas-fired space heaters, each with a maximum heat input rate of 0.15 million British thermal units per hour;
 - (2) Two (2) natural gas-fired air make-up units, with a maximum heat input rate of 0.18 million British thermal units per hour and 0.15 million British thermal units per hour, respectively;
 - (3) One (1) natural gas-fired boiler, with a maximum heat input rate of 3.0 million British thermal units per hour;
 - (4) Sixteen (16) natural gas fired HVAC units, fifteen (15) with a rating of 0.400 million British thermal units per hour, each, and one (1) with a rating of 0.350 million British thermal units per hour.

- (5) One (1) natural gas fired space heater with a rating of 0.075 million British thermal units per hour.
- (b) The following VOC storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons;
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (c) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (e) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (g) Paved and unpaved roads and parking lots with public access;
- (h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (i) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP:
 - (1) The cleaning solvent used on the UV coater;
 - (2) One (1) film cleaner used in the plating room;
- (j) Other activities or categories not previously identified:
 - (1) Four (4) binding operations, identified as Fox Stitcher, Norm Binder, Kolbus Binder, and Kolbus K-2, each with a maximum capacity of 560 pounds of paper waste per hour;
 - (2) Film processor used to develop black and white film; and
 - (3) Five (5) plate processors used to develop printing plates;
 - (4) One (1) casemaker, identified as Kolbus DA-36;
 - (5) One (1) tipper, identified as Hunkeler VEA; and
 - (6) Five (5) electric plate processing ovens.

Courier Kendallville, Inc.
Kendallville, Indiana
Permit Reviewer: NH/EVP

Second Significant Permit Revision
SPR 113-20307-00021
Revised by: EAL/MES

Page 8 of 49
OP No. F113-12093-00021

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) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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.

B.2 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.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-8-6]

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 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.6 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.7 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.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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

(b) 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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to

be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U.S. EPA, then the Permittee must furnish record directly to the U.S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 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.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; and
- (3) Denial of a permit renewal application.

(b) 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.

B.11 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 a 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, on the attached Certification Form, with each submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 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. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

(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.

Courier Kendallville, Inc.
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- (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, IDEM, OAQ, may require to determine the compliance status of the source.

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

B.13 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 prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) 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 contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.14 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 describes 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, 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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 the "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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) 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 compliance 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.

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 Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

within ten (10) calendar days from the date of the discovery of the deviation, except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

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

of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) An emergency as defined in 326 IAC 2-7-1(12); or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

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 FESOP 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 the "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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) 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.
- (2) If IDEM, OAQ upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
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 a reasonable deadline specified in writing by IDEM, OAQ, any additional information identified as 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
Indianapolis, Indiana 46204
- Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.
- (c) The Permittee may implement the 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]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 emissions allowable under 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
Indianapolis, Indiana 46204

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to 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), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and after submittal of the following additional information:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in 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).

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- (d) **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.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

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

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

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 at reasonable times 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements;
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]; and
- (f) Nothing in this permit shall be constructed to limit the Permittee's right, to the extent allowed by law, to obtain duplicate or split samples.

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
Indianapolis, Indiana 46204

The application which shall be submitted by the Permittee does not require the certification by the "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 2-8-11(b)(3)]

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. 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 317-233-0425 (ask for OAQ, Technical Support and Modeling 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 revision 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 failure to commence construction of the emission unit within eighteen (18) months from the date of issuance of the permit, or if during the construction of work is suspended for a continuous period of one (1) year or more.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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 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) 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.

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

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(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
Indianapolis, Indiana 46204

The notifications do not require a certification by the "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 14-10-4 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) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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
Indianapolis, Indiana 46204

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 the "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 within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within 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. 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)]

All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. 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 Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

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

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

Compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour (this time frame is determined on a case by case basis) until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

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

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

within ninety (90) days from the date of issuance of this permit.

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (c) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.
 - (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
 - (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
 - (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
 - (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
 - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- C.16 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 corrective actions. The Permittee shall submit a description of these corrective 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 corrective 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 and 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 documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information 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 kept 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) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "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
Indianapolis, Indiana 46204
- (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, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.19 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

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 16, with a maximum line speed of 1265 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 16 Upper Dryer and Hantscho Mark 16 Lower Dryer, each with a maximum heat input rate of 2.93 million British thermal units per hour, exhausting to one (1) stack, identified as 6;
- (b) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as M850, with a maximum line speed of 1600 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M130 M850 Upper Dryer and Harris M130 M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (g) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman 2, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman 2 dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (h) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (i) One (1) regenerative thermal oxidizer, identified as Cleanswitch, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 2. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.
- (j) One (1) regenerative thermal oxidizer, identified as Cleanswitch 2, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.

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

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

D.1.1 FESOP Limit [326 IAC 2-8-4][326 IAC 8-1-6]

- (a) VOC emissions from the printing press, identified as Mark 16, the printing press, identified as M850, the printing press, identified as Lithoman, the printing press, identified as Lithoman 2, the printing press, identified as Mark 6 (listed in Section D.2), the printing press, identified as M130 (listed in Section D.2), and the printing press, identified as Heidelberg Sheetfed Press (listed in Section D.2), shall be limited to less than 98.5 tons per tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit will be demonstrated by using the following equation:

$$E_n = U_n \times V_n \times F \times \{1 - (C_n/100) \times (D_n/100)\}$$

Where:

E_n	=	VOC emissions
U_n	=	Total usage of each material
V_n	=	VOC content of each material
F	=	Flash off factor of each material
C_n	=	Capture efficiency
D_n	=	Destruction efficiency (Oxidizer control efficiency)

One of the regenerative thermal oxidizers, either Cleanswitch 2 or Cleanswitch, shall be in operation at all times the printing presses identified as M130 and M850 are in operation, to meet the requirements of 326 IAC 8-1-6.

- (b) Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT) for the one (1) printing press, identified as Lithoman has been determined to be:

The use of one (1) of the regenerative thermal oxidizers, identified as Cleanswitch 2 or Cleanswitch, at all times the press is in operation.

- (c) Pursuant to 326 IAC 8-1-6, the Best Available Control technology (BACT) for the one (1) heat set web offset lithographic printing press, identified as Lithoman 2, shall be as follows:

- (1) The exhaust shall be vented to one of the two (2) regenerative thermal oxidizers (Cleanswitch or Cleanswitch 2) with a minimum of 97% destruction efficiency for VOC;
- (2) The VOC content of the fountain solution shall be no greater than 3% VOC as applied;
- (3) The blanket and roller washes shall have a vapor pressure no greater than 10 mm Hg at 20°C or the VOC content shall be limited to 2.5 lb/gal as applied; and
- (4) The capture efficiencies used for reporting compliance shall be as follows and are based on the US EPA's "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 94):
 - (A) 100 percent capture, by weight, of the VOC in press ready inks;
 - (B) 70 percent capture, by weight, of the VOC in press ready fountain solutions; and
 - (C) 40 percent capture, by weight, of the VOC in press ready automatic cleaning solvents.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

VOC input from the one (1) printing press, identified as Mark 16 shall be limited to less than 25 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 8-1-6 not applicable.

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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 printing press M850 and its control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency and overall VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.
- (b) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. This test is being required to demonstrate compliance with 326 IAC 2-8-4 (FESOP).

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer to achieve compliance with Conditions D.1.1(b) and (c) (BACT).

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the ink, coating, fountain solution and cleaning solvent manufacturers. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 VOC Emissions

At least one (1) regenerative thermal oxidizers, identified as Cleanswitch 2 or Cleanswitch, shall be in operation at all times when the printing press (M850) is in operation.

D.1.8 Volatile Organic Compound Control

- (a) When operating the printing press M850, the printing press M130 (listed in Section D.2), and the printing press Lithoman, the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, and the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 95.0% overall control efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation. Compliance with this condition shall deem 326 IAC 8-1-6 satisfied.
- (b) When operating the printing press Lithoman 2, the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, or the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 97.0% destruction efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) The Permittee shall maintain records of the materials used that contain any VOCs. The records shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1. The records shall contain, as a minimum, the following information:
- (1) The weight of VOC-containing material used and the weight percent VOC, including purchase orders and invoices necessary to verify the type and amount used; or
 - (2) The volume of VOC-containing material used and the weight of VOC per volume of VOC-containing material used.
 - (3) The weight of VOCs emitted for each compliance period, considering capture and destruction (or removal) efficiency.
 - (4) Operational parameters of the VOC emission control equipment, considering capture and destruction (or removal) efficiency.
 - (5) Operational parameters of the VOC emission control equipment, such as:
 - (A) Data used to establish the capture and destruction (or removal) efficiencies at the time of the initial compliance test; and
 - (B) Temperature readings.
- (b) To document compliance with Condition 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 Condition D.1.2.
- (1) The amount and VOC content of each ink, fountain solution, coating material and cleaning solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to inks and fountain solutions and those used as cleanup solvents;
 - (2) A monthly log of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) 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.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address 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 not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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SECTION D.2

FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (c) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 6, with a maximum line speed of 950 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 6 Upper Dryer and Hantscho Mark 6 Lower Dryer, each with a maximum heat input rate of 2.56 million British thermal units per hour, exhausting to one (1) stack, identified as 2;
- (d) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units and the addition of another four (4) printing units), identified as M130, with a maximum line speed of 1264 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (e) One (1) nonheat set sheetfed offset printing press (consisting of four (4) printing units), identified as Heidelberg Sheetfed Press, with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches;
- (f) One (1) sheetfed UV Coater with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches; and

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

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-8-11.1, WITH CONDITIONS LISTED BELOW.

Construction Conditions

General Construction Conditions

D.2.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.2.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.2.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

Operation Conditions

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

D.2.4 FESOP Limit [326 IAC 2-8-4][326 IAC 8-1-6]

- (a) VOC emissions from the printing press, identified as Mark 16 (listed in Section D.1), the printing press, identified as M850 (listed in Section D.1), the printing press, identified as Lithoman (listed in Section D.1), the printing press, identified as Lithoman 2 (listed in Section D.1), the printing press, identified as Mark 6, the printing press, identified as M130, and the printing press, identified as Heidelberg Sheetfed Press, shall be limited to less than 98.5 tons per twelve consecutive month period, with compliance determined at the end of each month. Compliance with this limit will be demonstrated by using the following equation:

$$E_n = U_n \times V_n \times F \times \{1 - (C_n/100) \times (D_n/100)\}$$

Where:

E_n	=	VOC emissions
U_n	=	Total usage of each material
V_n	=	VOC content of each material
F	=	Flash off factor of each material
C_n	=	Capture efficiency
D_n	=	Destruction efficiency (Oxidizer control efficiency)

One of the regenerative thermal oxidizers, either Cleanswitch 2 or Cleanswitch, shall be in operation at all times the printing presses identified as M130 and M850 are in operation, to meet the requirements of 326 IAC 8-1-6.

- (b) Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT) for the one (1) printing press, identified as Lithoman has been determined to be:

The use of one (1) of the regenerative thermal oxidizers, identified as Cleanswitch 2 or Cleanswitch, at all times the press is in operation.

D.2.5 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification which would increase the potential to emit VOC from press Mark 6 or the Heidelberg Sheetfed Press to twenty-five (25) tons per year or more, respectively, shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 8-1-6.

D.2.6 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 printing press M130 and its control devices.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency and overall VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.
- (b) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC control efficiency for the one (1) regenerative thermal

oxidizer, identified as Cleanswitch, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. This test is being required to demonstrate compliance with 326 IAC 2-8-4 (FESOP).

D.2.8 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.2.4 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the ink, fountain solution, coating and cleaning solvent manufacturers. However, IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.9 VOC Emissions

One (1) regenerative thermal oxidizer, identified as Cleanswitch 2 or Cleanswitch, shall be in operation at all times when the printing press (M130) is in operation.

D.2.10 Volatile Organic Compound Control

- (a) When operating the printing press M130, printing press M850 (listed in Section D.1), and the printing press Lithoman (listed in Section D.1) the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, and the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 95.0% overall control efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation. Compliance with this condition shall deem 326 IAC 8-1-6 satisfied.
- (b) When operating the printing press Lithoman 2 (listed in Section D.1), the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, or the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 97.0% destruction efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.11 Record Keeping Requirements

- (a) The Permittee shall maintain records of the materials used that contain any VOCs. The records shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in condition D.2.4. The records shall contain, as a minimum, the following information:
 - (1) The weight of VOC-containing material used and the weight percent VOC, including purchase orders and invoices necessary to verify the type and amount used; or
 - (2) The volume of VOC-containing material used and the weight of VOC per volume of VOC-containing material used.
 - (3) The weight of VOCs emitted for each compliance period, considering capture and destruction (or removal) efficiency.
 - (4) Operational parameters of the VOC emission control equipment, considering capture and destruction (or removal) efficiency.
 - (5) Operational parameters of the VOC emission control equipment, such as:

- (A) Data used to establish the capture and destruction (or removal) efficiencies at the time of the initial compliance test; and
 - (B) Temperature readings.
- (b) To document compliance with Condition D.2.5, 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 Condition D.2.5.
- (1) The amount and VOC content of each ink, fountain solution, coating material and cleaning solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A monthly log of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) 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.2.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.4 shall be submitted to the address 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 not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
- (1) Six (6) natural gas-fired space heaters, each with a maximum heat input rate of 0.15 million British thermal units per hour;
 - (2) Two (2) natural gas-fired air make-up units, with a maximum heat input rate of 0.18 million British thermal units per hour and 0.15 million British thermal units per hour, respectively; and
 - (3) One (1) natural gas-fired boiler, with a maximum heat input rate of 3.0 million British thermal units per hour.

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

Boilers

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

D.3.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which have 10 million British thermal units per hour heat input or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input. Therefore PM emissions from the 3 million British thermal units per hour boiler shall be limited to 0.6 lb/MMBtu heat input.

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Courier Kendallville, Inc.
Source Address: 2500 Marion Drive, Kendallville, Indiana 46755
Mailing Address: 2500 Marion Drive, Kendallville, Indiana 46755
FESOP No.: F113-12093-00021

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
AIR COMPLIANCE BRANCH**

**100 North Senate Avenue
Indianapolis, Indiana 46204
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Courier Kendallville, Inc.
Source Address: 2500 Marion Drive, Kendallville, Indiana 46755
Mailing Address: 2500 Marion Drive, Kendallville, Indiana 46755
FESOP No.: F113-12093-00021

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2
<input checked="" type="radio"/> 1. 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 317-233-5674, ask for Compliance Section); and ☐The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<input checked="" type="radio"/> 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C) ☐The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

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

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? 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/deviation:
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**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Courier Kendallville, Inc.
Source Address: 2500 Marion Drive, Kendallville, Indiana 46755
Mailing Address: 2500 Marion Drive, Kendallville, Indiana 46755
FESOP No.: F113-12093-00021

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. 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.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Courier Kendallville, Inc.
Source Address: 2500 Marion Drive, Kendallville, IN 46755
Mailing Address: 2500 Marion Drive, Kendallville, IN 46755
FESOP MPR No.: 113-16834-00021
Facility: One (1) heat set web offset lithographic printing press, identified as Mark 16
Parameter: VOC usage
Limit: VOC usage not to exceed 25 tons per year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month	VOC Usage Previous 11 Months	VOC Usage 12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 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**

FESOP Quarterly Report

Source Name: Courier Kendallville, Inc.
 Source Address: 2500 Marion Drive, Kendallville, Indiana 46755
 Mailing Address: 2500 Marion Drive, Kendallville, Indiana 46755
 FESOP No.: F113-12093-00021
 Facilities: Seven (7) printing presses (Mark 16, M850, Lithoman, Lithoman 2, Mark 6, M130, Heidelberg Sheetfed Press)
 Parameter: VOC Emissions
 Limit: 98.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance shall be shown using the following equation:

$$E_n = U_n \times V_n \times F \times \{1 - (C_n/100) \times (D_n/100)\}$$

Where:
 E_n = VOC emissions
 U_n = Total usage of each material
 V_n = VOC content of each material
 F = Flash off factor of each material
 C_n = Capture efficiency
 D_n = Destruction efficiency (Oxidizer control efficiency)

YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
- 9 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

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Courier Kendallville, Inc.
Source Location:	2500 Marion Drive, Kendallville, Indiana 46755
County:	Noble
SIC Code:	2752
Operation Permit No.:	F 113-12093-00021
Operation Permit Issuance Date:	October 13, 2000
Significant Permit Revision No.:	SPR 113-20307-00021
Permit Reviewer:	Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed a significant permit revision application from Courier Kendallville, Inc. relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman 2, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman 2 dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (b) One (1) regenerative thermal oxidizer, identified as Cleanswitch 2, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600°F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.
- (c) Five (5) natural gas fired HVAC units, with a rating of 0.400 million British thermal units per hour, each.
- (d) One (1) natural gas fired space heater with a rating of 0.075 million British thermal units per hour.

History

Courier Kendallville, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) on October 13, 2000. On January 10, 2005, Courier Kendallville, Inc. submitted an application to the OAQ requesting to add an additional heat set web offset lithographic printing press (Lithoman 2), equipped with a natural gas fired dryer, to their existing plant. The new press will be controlled by a regenerative thermal oxidizer, identified as Cleanswitch 2. The oxidizer will replace the existing smaller oxidizer identified as Millennium, and will control VOC emissions from presses M130, M850, Lithoman, and the proposed Lithoman 2.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

The existing stacks which this modification will affect are as follows:

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
Oxy 1	Cleanswitch 2 Oxidizer	32.0	3.88	41,937	425
Oxy 2	Cleanswitch Oxidizer	32.0	3.88	41,937	425

Recommendation

The staff recommends to the Commissioner that the FESOP Significant Permit Revision 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 January 10, 2005.

Emission Calculations

See pages 1 through 5 of Appendix A of this document for detailed emissions calculations.

Potential to Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.111
PM ₁₀	0.446
SO ₂	0.035
VOC	637
CO	4.925
NO _x	5.863

HAPs	Potential To Emit (tons/year)
Single HAP	Less than 10
Total HAPs	Less than 25

Justification for Revision

The FESOP is being revised through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f)(1) since the potential to emit VOC from this revision is greater than twenty five (25) tons per year.

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
1-Hour Ozone	attainment
8-Hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Noble County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0.491
PM ₁₀	1.96
SO ₂	0.155
VOC	Limited to less than 100
CO	21.7
NO _x	25.8

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of two-hundred fifty (250) tons per year or more, and it is not one of the twenty-eight (28) listed source categories.
- (b) These emissions are based upon the TSD for SPR 113-17840-00021 and calculations performed during review of this FESOP revision.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units associated with this revision after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Revision	0.111	0.446	0.035	0.322	4.92	5.86	-
PSD Threshold Level	250	250	250	250	250	250	-

- (a) The VOC emissions from the proposed new printing press are to be limited under an existing VOC limit that covers six (6) existing presses, therefore, the only increase in VOC emissions due to this revision are from the natural gas combustion associated with the Lithoman 2 dryer and the supplemental fuel for the Cleanswitch 2 oxidizer. The VOC limit has been decreased from 98.6 to 98.5 tons per year to account for the increase in natural gas combustion emissions.
- (b) This revision to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

- (c) This revision to the existing FESOP will not change the status of the stationary source because the emissions from the entire source will still be limited to less than the Part 70 major source thresholds.

Federal Rule Applicability

- (a) The one (1) heat set web offset lithographic printing press, identified as Lithoman 2, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart QQ), because this printing press is not a publication rotogravure printing press.
- (b) The one (1) heat set web offset lithographic printing press, identified as Lithoman 2, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart KK because the printing press is not a publication rotogravure, packaging rotogravure or wide-web flexographic printing press.
- (c) The potential to emit of a single Hazardous Air Pollutant (HAP) is limited to less than ten (10) tons per year and the potential to emit of combined Hazardous Air Pollutants (HAPs) is limited to less than twenty-five (25) tons per year from the entire source. Therefore, this source is a minor source of Hazardous Air Pollutants (HAPs) and the requirements of 40 CFR 63, Subpart JJJJ are not applicable to the one (1) heat set web offset lithographic printing press, identified as Lithoman 2.

State Rule Applicability - Individual Facilities

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

The unrestricted potential to emit VOC from this revision is greater than two-hundred fifty (250) tons per year. The potential to emit VOC from the entire source is limited to less than one-hundred (100) tons per year. Therefore, this source is a minor source pursuant to 326 IAC 2-2.

326 IAC 2-8-4 (FESOP)

The VOC emissions from the proposed heat set web offset lithographic printing press, identified as Lithoman 2, shall be included in the existing VOC limit which already limits the VOC emissions from the Mark 6, the Mark 16, the M130, the M850, the Lithoman, and the Heidelberg Sheetfed Press.

This limit had been a VOC emission limit of less than 98.6 tons per year, which was designed to ensure that VOC emissions from the entire source are less than one hundred (100) tons per year, including VOC emissions from natural gas combustion. This limit must be changed to be less than 98.5 tons of VOC per year, to account for the increased VOC emissions from the additional natural gas combustion that is associated with this revision.

Compliance with this limit will be demonstrated by using the following equation:

$$E_n = U_n \times V_n \times F \times \{1 - (C_n/100) \times (D_n/100)\}$$

Where:

E_n	=	VOC emissions
U_n	=	Total usage of each material
V_n	=	VOC content of each material
F	=	Flash off factor of each material
C_n	=	Capture efficiency
D_n	=	Destruction efficiency (Oxidizer control efficiency)

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

The one (1) heat set web offset lithographic printing press, identified as Lithoman 2, is subject to the requirements of 326 IAC 8-1-6 because the VOC emissions from this press are greater than twenty-five (25) tons per year.

After conducting the top-down BACT analysis (see Appendix B of this document), the Best Available Control technology (BACT) for the one (1) heat set web offset lithographic printing press, identified as Lithoman 2, shall be as follows:

- (a) The exhaust shall be vented to one of the two (2) regenerative thermal oxidizers (Cleanswitch or Cleanswitch 2) with a minimum of 97% destruction efficiency for VOC;
- (b) The VOC content of the fountain solution shall be no greater than 3% VOC as applied;
- (c) The blanket and roller washes shall have a vapor pressure no greater than 10 mm Hg at 20°C or the VOC content shall be limited to 2.5 lb/gal as applied; and
- (d) The capture efficiencies used for reporting compliance shall be as follows and are based on the US EPA's "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 94):
 - (1) 100 percent capture, by weight, of the VOC in press ready inks;
 - (2) 70 percent capture, by weight, of the VOC in press ready fountain solutions; and
 - (3) 40 percent capture, by weight, of the VOC in press ready automatic cleaning solvents.

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

The one (1) heat set web offset lithographic printing press, identified as Lithoman 2, is not subject to the requirements of 326 IAC 8-5-5, because the printing press does not involve packaging rotogravure, publication rotogravure or flexographic printing.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this revision.

Testing Requirements

Pursuant to SPR 113-17840-00021, the existing Cleanswitch oxidizer was tested in December 2004 in order to verify the required control efficiency of 95%. The testing showed the control efficiency of the oxidizer to be 97.95%. Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency and overall VOC control efficiency for the proposed new regenerative thermal oxidizer, identified as Cleanswitch 2, utilizing methods as approved by the Commissioner.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

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) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 16, with a maximum line speed of 1265 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 16 Upper Dryer and Hantscho Mark 16 Lower Dryer, each with a maximum heat input rate of 2.93 million British thermal units per hour, exhausting to one (1) stack, identified as 6;
- (b) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as M850, with a maximum line speed of 1600 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.4 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (c) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 6, with a maximum line speed of 950 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 6 Upper Dryer and Hantscho Mark 6 Lower Dryer, each with a maximum heat input rate of 2.56 million British thermal units per hour, exhausting to one (1) stack, identified as 2;
- (d) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units and the addition of another four (4) printing units), identified as M130, with a maximum line speed of 1264 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (e) One (1) nonheat set sheetfed offset printing press (consisting of four (4) printing units), identified as Heidelberg Sheetfed Press, with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches;

- (f) One (1) sheetfed UV Coater with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches; and
- (g) ~~One (1) regenerative thermal oxidizer, identified as Millenium, using natural gas as a supplementary fuel at a maximum heat input rate of 2.29 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, and Lithoman.~~

One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman 2, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman 2 dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.

- (h) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (i) One (1) regenerative thermal oxidizer, identified as Cleanswitch, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 2. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, **Lithoman** and Lithoman 2.
- (j) **One (1) regenerative thermal oxidizer, identified as Cleanswitch 2, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.**

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, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
 - (1) Six (6) natural gas-fired space heaters, each with a maximum heat input rate of 0.15 million British thermal units per hour;
 - (2) Two (2) natural gas-fired air make-up units, with a maximum heat input rate of 0.18 million British thermal units per hour and 0.15 million British thermal units per hour, respectively;
 - (3) One (1) natural gas-fired boiler, with a maximum heat input rate of 3.0 million British thermal units per hour;
 - (4) ~~Sixteen Eleven (16 11)~~ **Sixteen Eleven (16 11)** natural gas fired HVAC units, ~~fifteen ten (15 10)~~ **fifteen ten (15 10)** with a rating of 0.400 million British thermal units per hour, each, and one (1) with a rating of 0.350 million British thermal units per hour.

- (5) **One (1) natural gas fired space heater with a rating of 0.075 million British thermal units per hour.**

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 16, with a maximum line speed of 1265 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 16 Upper Dryer and Hantscho Mark 16 Lower Dryer, each with a maximum heat input rate of 2.93 million British thermal units per hour, exhausting to one (1) stack, identified as 6;
- (b) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as M850, with a maximum line speed of 1600 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M130 M850 Upper Dryer and Harris M130 M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (g) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman 2, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman 2 dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.**
- (h) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Lithoman, exhausting through stacks Oxy 1 or Oxy 2, with a maximum line speed of 2211 feet per minute and a maximum printing width of 57.0 inches. The press is equipped with one (1) natural gas-fired dryer, identified as Lithoman dryer, exhausting to one (1) of two (2) stacks Oxy 1 or Oxy 2, rated at: 10.5 million British thermal units per hour.
- (i) One (1) regenerative thermal oxidizer, identified as Cleanswitch, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 2. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, **Lithoman** and Lithoman 2.
- (j) One (1) regenerative thermal oxidizer, identified as Cleanswitch 2, using natural gas as a supplementary fuel at a maximum heat input rate of 0.81 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, Lithoman and Lithoman 2.**

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

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

D.1.1 FESOP Limit [326 IAC 2-8-4][326 IAC 8-1-6]

- (a) VOC emissions from the printing press, identified as Mark 16, the printing press, identified as M850, the printing press, identified as Lithoman, **the printing press, identified as Lithoman 2**, the printing press, identified as Mark 6 (listed in Section D.2), the printing press, identified

as M130 (listed in Section D.2), and the printing press, identified as Heidelberg Sheetfed Press (listed in Section D.2), shall be limited to less than 98.56 tons per tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit will be demonstrated by using the following equation:
$$En = Un \times Vn \times F \times \{1 - (Cn/100) \times (Dn/100)\}$$

Where:

En = VOC emissions
Un = Total usage of each material
Vn = VOC content of each material
F = Flash off factor of each material
Cn = Capture efficiency
Dn = Destruction efficiency (Oxidizer control efficiency)

One of the regenerative thermal oxidizers, either ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, shall be in operation at all times the printing presses identified as M130 and M850 are in operation, to meet the requirements of 326 IAC 8-1-6.

- (b) Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT) for the one (1) printing press, identified as Lithoman has been determined to be:

The use of one (1) of the regenerative thermal oxidizers, identified as ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, at all times the press is in operation.

- (c) **Pursuant to 326 IAC 8-1-6, the Best Available Control technology (BACT) for the one (1) heat set web offset lithographic printing press, identified as Lithoman 2, shall be as follows:**

- (1) **The exhaust shall be vented to one of the two (2) regenerative thermal oxidizers (Cleanswitch or Cleanswitch 2) with a minimum of 97% destruction efficiency for VOC;**
- (2) **The VOC content of the fountain solution shall be no greater than 3% VOC as applied;**
- (3) **The blanket and roller washes shall have a vapor pressure no greater than 10 mm Hg at 20°C or the VOC content shall be limited to 2.5 lb/gal as applied; and**
- (4) **The capture efficiencies used for reporting compliance shall be as follows and are based on the US EPA's "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 94):**
 - (A) **100 percent capture, by weight, of the VOC in press ready inks;**
 - (B) **70 percent capture, by weight, of the VOC in press ready fountain solutions; and**
 - (C) **40 percent capture, by weight, of the VOC in press ready automatic cleaning solvents.**

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) **Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency and overall VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.** ~~The Permittee shall perform VOC testing on the 2.29 MM Btu/hr thermal oxidizer, identified as Millenium, by a method approved by the Commissioner, to determine the minimum operating temperature that will achieve 95.0% overall efficiency for this oxidizer. In addition to these requirements and pursuant to 326 IAC 2-1.1-11, IDEM may require compliance testing at any time to assure compliance with all applicable requirements.~~
- (b) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. This test is being required to demonstrate compliance with 326 IAC 2-8-4 (FESOP).

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer to achieve compliance with Conditions D.1.1(b) **and (c)** (BACT).

D.1.7 VOC Emissions

At least one (1) regenerative thermal oxidizer, identified as ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, shall be in operation at all times when the printing press (M850) is in operation.

~~Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]~~

D.1.8 Volatile Organic Compound Control

- (a) When operating the printing press M850 and the printing press M130 (listed in Section D.2), and the printing press Lithoman, the one (1) regenerative thermal oxidizer, identified as ~~Millenium~~ **Cleanswitch 2**, and the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 95.0% overall control efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation. Compliance with this condition shall deem 326 IAC 8-1-6 satisfied.
- (b) **When operating the printing press Lithoman 2, the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, or the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 97.0% destruction efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation.**

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) The Permittee shall maintain records of the materials used that contain any VOCs. The

records shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1. The records shall contain, as a minimum, the following information:

- (1) The weight of VOC-containing material used and the weight percent VOC, including purchase orders and invoices necessary to verify the type and amount used; or
 - (2) The volume of VOC-containing material used and the weight of VOC per volume of VOC-containing material used.
 - (3) The weight of VOCs emitted for each compliance period, considering capture and destruction (or removal) efficiency.
 - (4) Operational parameters of the VOC emission control equipment, considering capture and destruction (or removal) efficiency.
 - (5) Operational parameters of the VOC emission control equipment, such as:
 - (A) Data used to establish the capture and destruction (or removal) efficiencies at the time of the initial compliance test; and
 - (B) Temperature readings.
- (b) To document compliance with Condition 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 Condition D.1.2.
- (1) The amount and VOC content of each ink, fountain solution, coating material and cleaning solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to inks and fountain solutions and those used as cleanup solvents;
 - (2) A monthly log of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) 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.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address 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 not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (c) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units), identified as Mark 6, with a maximum line speed of 950 feet per minute and a maximum printing width of 35.5 inches. The press is equipped with two (2) natural gas-fired dryers, identified as Hantscho Mark 6 Upper Dryer and Hantscho Mark 6 Lower Dryer, each with a maximum heat input rate of 2.56 million British thermal units per hour, exhausting to one (1) stack, identified as 2;
- (d) One (1) heat set web offset lithographic printing press (consisting of four (4) printing units and the addition of another four (4) printing units), identified as M130, with a maximum line speed of 1264 feet per minute and a maximum printing width of 37.5 inches, utilizing a regenerative thermal oxidizer for VOC control. The press is equipped with two (2) natural gas-fired dryers, identified as Harris M850 Upper Dryer and Harris M850 Lower Dryer, each with a maximum heat input rate of 4.0 million British thermal units per hour, exhausting to one (1) of two (2) stacks, identified as Oxy 1 or Oxy 2;
- (e) One (1) nonheat set sheetfed offset printing press (consisting of four (4) printing units), identified as Heidelberg Sheetfed Press, with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches;
- (f) One (1) sheetfed UV Coater with a maximum line speed of 400 feet per minute and a maximum printing width of 39.5 inches; and
- ~~(g) One (1) regenerative thermal oxidizer, identified as Millenium, using natural gas as a supplementary fuel at a maximum heat input rate of 2.29 million British thermal units per hour, exhausting through one (1) stack, identified as Oxy 1. The oxidizer has a minimum temperature of 1,600 F and is used to control VOC emissions from units M130, M850, and Lithoman.~~

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

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

D.2.4 FESOP Limit [326 IAC 2-8-4][326 IAC 8-1-6]

- (a) VOC emissions from the printing press, identified as Mark 16 (listed in Section D.1), the printing press, identified as M850 (listed in Section D.1), the printing press, identified as Lithoman (listed in Section D.1), **the printing press, identified as Lithoman 2 (listed in Section D.1)**, the printing press, identified as Mark 6, the printing press, identified as M130, and the printing press, identified as Heidelberg Sheetfed Press, shall be limited to less than 98.56 tons per twelve consecutive month period, with compliance determined at the end of each month. Compliance with this limit will be demonstrated by using the following equation:

$$En = Un \times Vn \times F \times \{1 - (Cn/100) \times (Dn/100)\}$$

Where:

- En = VOC emissions
- Un = Total usage of each material
- Vn = VOC content of each material
- F = Flash off factor of each material
- Cn = Capture efficiency

Dn = Destruction efficiency (Oxidizer control efficiency)

One of the regenerative thermal oxidizers, either ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, shall be in operation at all times the printing presses identified as M130 and M850 are in operation, to meet the requirements of 326 IAC 8-1-6.

- (b) Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT) for the one (1) printing press, identified as Lithoman has been determined to be:

The use of one (1) of the regenerative thermal oxidizers, identified as ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, at all times the press is in operation.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) **Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency and overall VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. The Permittee shall perform VOC testing on the 2.29 MM Btu/hr thermal oxidizer, identified as Millenium, by a method approved by the Commissioner, to determine the minimum operating temperature that will achieve 95.0% overall efficiency for this oxidizer. In addition to these requirements and pursuant to 326 IAC 2-1.1-11, IDEM may require compliance testing at any time to assure compliance with all applicable requirements.**
- (b) **Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the VOC control efficiency for the one (1) regenerative thermal oxidizer, identified as Cleanswitch, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. This test is being required to demonstrate compliance with 326 IAC 2-8-4 (FESOP).**

D.2.8 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.2.4 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the ink, fountain solution, coating and cleaning solvent manufacturers. However, IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.9 VOC Emissions

One (1) regenerative thermal oxidizer, identified as ~~Millenium~~ **Cleanswitch 2** or Cleanswitch, shall be in operation at all times when the printing press (M130) is in operation.

~~Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]~~

D.2.10 Volatile Organic Compound Control

- (a) When operating the printing press M130, printing press M850 (listed in Section D.1), and the printing press Lithoman (listed in Section D.1) the one (1) regenerative thermal oxidizer, identified as ~~Millenium~~ **Cleanswitch 2**, and the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 95.0% overall control efficiency. The temperature of the burner of the thermal oxidizer shall be

continuously monitored and recorded whenever any of the facilities are in operation. Compliance with this condition shall deem 326 IAC 8-1-6 satisfied.

- (b) **When operating the printing press Lithoman 2, the one (1) regenerative thermal oxidizer, identified as Cleanswitch 2, or the one (1) regenerative thermal oxidizer, identified as Cleanswitch, shall maintain a minimum operating temperature of 1,600°F or a temperature determined in the most recent compliance stack tests to maintain at least 97.0% destruction efficiency. The temperature of the burner of the thermal oxidizer shall be continuously monitored and recorded whenever any of the facilities are in operation.**

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.11 Record Keeping Requirements

- (a) The Permittee shall maintain records of the materials used that contain any VOCs. The records shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in condition D.2.4. The records shall contain, as a minimum, the following information:
- (1) The weight of VOC-containing material used and the weight percent VOC, including purchase orders and invoices necessary to verify the type and amount used; or
 - (2) The volume of VOC-containing material used and the weight of VOC per volume of VOC-containing material used.
 - (3) The weight of VOCs emitted for each compliance period, considering capture and destruction (or removal) efficiency.
 - (4) Operational parameters of the VOC emission control equipment, considering capture and destruction (or removal) efficiency.
 - (5) Operational parameters of the VOC emission control equipment, such as:
 - (a) Data used to establish the capture and destruction (or removal) efficiencies at the time of the initial compliance test; and
 - (b) Temperature readings.
- (b) To document compliance with Condition D.2.5, 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 Condition D.2.5.
- (1) The amount and VOC content of each ink, fountain solution, coating material and cleaning solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A monthly log of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and

- (5) 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.2.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.4 shall be submitted to the address 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 not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

FESOP Quarterly Report

Source Name: Courier Kendallville, Inc.
 Source Address: 2500 Marion Drive, Kendallville, Indiana 46755
 Mailing Address: 2500 Marion Drive, Kendallville, Indiana 46755
 FESOP No.: F113-12093-00021
 Facilities: ~~Seven~~ **Six (76)** printing presses (Mark 16, M850, Lithoman, **Lithoman 2**, Mark 6, M130, Heidelberg Sheetfed Press)
 Parameter: VOC Emissions
 Limit: 98.56 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance shall be shown using the following equation:

$$E_n = U_n \times V_n \times F \times \{1 - (C_n/100) \times (D_n/100)\}$$

Where:

- En = VOC emissions
- Un = Total usage of each material
- Vn = VOC content of each material
- F = Flash off factor of each material
- Cn = Capture efficiency
- Dn = Destruction efficiency (Oxidizer control efficiency)

YEAR: _____

Month	VOC emissions (tons)	VOC emissions (tons)	VOC emissions (tons)
	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.

Conclusion

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 113-20307-00021.

**Appendix A: Emissions Calculations
VOC From Printing Press Operations**

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
Permit Number: 113-20307
Plt ID: 113-00021
Reviewer: Edward A. Longenberger
Application Date: January 10, 2005

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
Lithoman 2	2211	57	794877

INK VOCS					
Ink Name	Maxium Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
Ink-Process Black	4	34.56%	80.00%	794877	439.54
Ink-Process Blue	4	39.62%	80.00%	794877	503.89
Ink-Process Red	4	40.54%	80.00%	794877	515.59
Ink-Process Yellow	4	43.85%	80.00%	794877	557.69
Fountain Solution (Emerald AMVP)	0.15	87.40%	100.00%	794877	52.10
Cleaning Solvent (A-60 Odorless)	0.14	96.80%	50.00%	794877	26.93
Cleaning Solvent (LPC)	0.14	92.40%	50.00%	794877	25.71
Misc	0.001	75.00%	100.00%	794877	0.30

Total VOC Emissions =	637.02 Ton/yr
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METHODOLOGY

Totals are worst case ink, plus the fountain solution, plus the worst case cleaning solvent, plus misc.

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin² per Year

VOC = Maximum Coverage pounds per MMin² * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80% and NON-HEATSET OFFSET LITHOGRAPHIC PRINTING HAS AN ASSUMED FLASH OFF OF 5%.

OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (9/93))

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

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
Permit Number: 113-20307
Pit ID: 113-00021
Reviewer: Edward A. Longenberger
Application Date: January 10, 2005

Unit	MMBtu/hr
Lithoman 2 dryer	10.50
Cleanswitch 2	0.81
New insig.	2.075
Total	13.39

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

13.39

117

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.111	0.446	0.035	5.863	0.322	4.925

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 3 for HAPs emissions calculations.

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

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
Permit Number: 113-20307
Pit ID: 113-00021
Reviewer: Edward A. Longenberger
Application Date: January 10, 2005

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.000123	0.000070	0.004397	0.105527	0.000199

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.00003	0.00006	0.00008	0.00002	0.00012	0.111

Methodology is the same as page 2.

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

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

Natural Gas Combustion from Entire Source

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
Permit Number: 113-20307
Plt ID: 113-00021
Reviewer: Edward A. Longenberger
Application Date: January 10, 2005

Unit	MMBtu/hr
Mark 16	5.86
M850	8.8
Mark 6	5.12
M130	8
Lithoman dryer	10.50
Cleanswitch	0.81
Lithoman 2 dryer	10.50
Cleanswitch 2	0.81
Insignificant	10.655
Total	61.06

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

61.06

535

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.508	2.032	0.160	26.742	1.471	22.463

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 5 for HAPs emissions calculations.

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

Company Name: Courier Kendallville, Inc.
Address City IN Zip: 2500 Marion Drive, Kendallville, Indiana 46755
Permit Number: 113-20307
Pit ID: 113-00021
Reviewer: Edward A. Longenberger
Application Date: January 10, 2005

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.000562	0.000321	0.020057	0.481358	0.000909

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.00013	0.00029	0.00037	0.00010	0.00056	0.505

Methodology is the same as page 4.

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

Appendix B

Best Available Control Technology (BACT) Determination

Source Name:	Courier Kendallville, Inc.
Source Location:	2500 Marion Drive, Kendallville, Indiana 46755
County:	Noble
SIC Code:	2752
Operation Permit No.:	F 113-12093-00021
Operation Permit Issuance Date:	October 13, 2000
Significant Permit Revision No.:	SPR 113-20307-00021
Permit Reviewer:	Edward A. Longenberger

The Indiana Department of Environmental Management (IDEM) has performed the following BACT review for a revision to an existing publication rotogravure printing source owned and operated by Courier Kendallville, Inc., located in Kendallville, Indiana. This revision will permit the construction of one (1) heat set web offset lithographic printing press, identified as Lithoman 2, and a regenerative thermal oxidizer, identified as Cleanswitch 2.

The source is located in Noble County which is designated as attainment or unclassifiable for all criteria pollutants. Based upon emission calculations completed by IDEM and the source, the modification will result in a net increase of potential volatile organic compound (VOC) emissions of greater than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC 8-1-6 the source shall reduce VOC emissions from the new facilities, which are not regulated by other provisions of 326 IAC 8, using best available control technology (BACT). The purpose of this BACT Analysis is to evaluate the level of control that constitutes BACT for the affected facilities.

IDEM conducts BACT analyses in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft US EPA *New Source Review Workshop Manual*, which outlines the steps for conducting a top-down BACT analysis. The steps are discussed as follows:

1. Identify all potentially available control options

The first step in evaluating potential applicable control technologies involved a review of control technology determinations made for permitted heatset web lithographic printing sources. The USEPA's RACT /BACT /LAER clearinghouse (RBLC) database was searched for the purpose of identifying comparable sources that have implemented BACT for the affected facilities. This search was performed in the following steps:

- (a) A search was first conducted by the same SIC Group as for the source (275 – Commercial Printing). Thirteen (13) publication rotogravure printing sources were identified in the RBLC database for the past ten (10) years. Three (3) sources out of the thirteen (13) identified sources performed a BACT analysis for the purpose of analyzing heatset web lithographic printing press operations. Since this type of printing operation is representative of the subject facilities at Courier Kendallville, Inc., these three (3) sources were included in the list of comparable sources. The three (3) identified sources were two (2) Quad Graphics, Inc. plants in Oklahoma and one (1) Quad/Graphics, Inc. plant in Martinsburg, WV. The BACT or LAER determination has been based on use of add-on control devices at the three (3) sources. All three (3) sources have used 97.5% control efficiency through the use of an oxidizer for VOC control as BACT.
- (b) Finally, a RBLC search was conducted specifically searching for printing-publication (No.: 41.022) and printing/publication (No.:41.023) process type. Twenty two (22) printing-publication process types and fourteen (14) printing/publication process type sources were identified. Thirteen (13) sources out of the thirty six (36) identified sources performed a BACT analysis for the purpose of analyzing heatset web lithographic printing press operations. Since this type of printing operation

is representative of the subject facilities at Courier Kendallville, Inc., these thirteen (13) sources were included in the list of comparable sources. The BACT or LAER determinations at the thirteen (13) sources are summarized in Table 1. IDEM also reviewed the RBLC Clearing house for other determinations for coating or related operations using pollution control devices on or after January 1, 2000. These determinations are summarized in Table 2.

With one exception, the BACT or LAER determination has been based on the use of an add-on control device, frequently combined with requirements of low VOC fountain solution (generally < 5% VOC in the applied fountain solution) and low (30% VOC or less) or low vapor pressure (VOC composite vapor pressure of 10 mm Hg or less at 20°C) cleaning solvents. Review of Table 1 and 2 reveals that add-on control devices with destruction efficiencies from 90% to 98% have been established as BACT or LAER for variety of VOC sources, including heatset lithographic printing operations.

Table 1- BACT and LAER determinations for Heatset Web Lithographic Printing

ID	Date	BACT /LAER	Determination	Facility	
GA-00081	4/28/98	BACT	95% Oxidizer, VOC limits on coatings and solvents	World Color	Limits on VOC content of coatings and solvents not specified. Use of covered containers for rags and towels.
IL-055	3/1/98	LAER	96% Oxidizer, VOC limits on fountain solution and cleaning solution	Brown Printing Company	Chilled reservoir or low VOC fountain solution. Low vapor pressure or low VOC cleaning solution. Limits not specified.
IL-0069	9/6/00	BACT	97% Oxidizer, low vapor pressure or low VOC cleaning solvent, Alcohol free fountain solution	Quebecor World	Cleaning solution with 5.0 mm Hg VOC composite partial pressure (CPP) at 68 deg. F, or 30% volatile organic matter by wt. and VOC CPP <10 mm of Hg. Fountain solution has no alcohol and VOC = 0.5% by volume as applied.
IL-0070	3/14/01	LAER	existing oxidizer system must meet 97% destruction; if new afterburner installed, 99% or 98% and 1500 F	Quebecor World	Cleaning solution with 5.0 mm Hg VOC composite partial pressure (CPP) at 68 deg. F, or 30% volatile organic matter by wt. and VOC CPP <10 mm of Hg. Fountain solution has no alcohol and VOC = 0.5% by volume as applied.
OK-0054	8/21/01	BACT	97.5% Oxidizer	Quadgraphics	Only a portion of fugitive VOC emissions from the fountain solution & automatic blanket wash will be captured and controlled thru the thermal oxidizer. Fugitive emissions are limited by VOC content, vapor pressure Limits and work practice procedures. Limits not specified.
OK-0097	2/3/04	BACT	97.5% Oxidizer	Quadgraphics	Only a portion of fugitive VOC emissions from the fountain solution & automatic blanket wash will be captured and controlled thru the thermal oxidizer. Fugitive emissions are limited by VOC content, vapor pressure Limits and work practice procedures. Limits not specified.

ID	Date	BACT /LAER	Determination	Facility	
TN-0091	4/14/97	BACT	97% Thermal Oxidizer	World Color	VOC emissions limited to 3.51% of the mass of VOC per mass of all ink, fountain solution, coating, and blanket wash used (including water and exempt compounds)
WI-0084	3/8/99	BACT	97.5% Thermal Oxidizer	Quadgraphics	No composition limits specified
WI-0140	7/13/99	BACT	97.5% Thermal Oxidizer	Quadgraphics	No limits on VOC content
WI-0153	4/26/00	BACT	97.5% Thermal Oxidizer	Quadgraphics	No composition limits specified
WI-0176	8/14/00	BACT	97.5% Thermal Oxidizer	Quadgraphics	No composition limits specified
WI-0188	6/24/97	LAER	Use of good operating procedures with solvents used in the cleaning operation.	Golden Books Publishing Company	Use of good operating procedures with solvents used in clean up operations. No composition limits specified.
WV-0013	8/30/01	BACT	97.5% Thermal Oxidizer	Quadgraphics	No composition limits specified

Table 2- BACT and LAER determinations for other coating sources using VOC control devices

ID	Date	BACT /LAER	Determination	Facility
AL-0191	3/23/04	BACT	95% Thermal Oxidizer	Hyundai
IN-0113	2/3/03	BACT	RTO (Efficiency not specified)	Masterbrand Cabinets, Inc
AR-0059	1/7/03	BACT	90% RTO/CTO	Georgia Pacific Oriented Strandboard
AL-0192	10/18/02	BACT	95% RTO	Honda Manufacturing
WI-0193	9/25/02	BACT	95% Catalytic or Regenerative Oxidizer	Pecheney Plastic Packaging
WI-0189	6/11/02	BACT	95% Catalytic Oxidation System	Curwood, Inc.
CA-0986	5/7/02	LAER	95% Regenerative Thermal Oxidizer	Latex Technology
SC-0074	4/8/02	BACT	95% TCO	Kronotex, USA
MI-0351	4/2/02	BACT	RTO (Efficiency not specified)	General Motors
CA-0985	8/20/01	LAER	95% Thermal Oxidizer	Watkins Manufacturing
WI-0169	6/22/01	BACT	96.7% Thermal Oxidizer	3M
WI-0143	6/1/01	BACT	95% Catalytic Oxidizer system	Bemis Films
MI-0352	11/3/00	BACT	98% Oxidizer for flexo coater, VOC limits on fountain solution and cleaning solvent	Pollard (US) Ltd.
FL-0213	9/26/00	BACT	95% Regenerative Thermal Oxidizer	Nallite International, Inc
VA-0246	8/18/00	BACT	97.5% Incinerator	Nynax America Corp.
IN-0103	6/28/00	BACT	95% RTO	AM general
TN-0088	6/6/00	BACT	Recuperative Thermal Oxidizer (Efficiency not specified)	Saturn Corporation
MI-0280	3/27/00	BACT	Recuperative Thermal Oxidizer (Efficiency not specified)	Depor Industries, Inc
LA-0161	3/24/00	BACT	95% Oxidizer	General Motors

2. BACT Determination

Destruction Efficiency

Although much of the focus on controlling VOC emissions from heatset web offset lithographic printing emphasizes the destruction efficiency of add-on pollution control devices, best available control technology (BACT) for this process involves several key components in addition to add-on controls.

These measures need to be considered in the aggregate for the control of VOC emissions from the process, rather than just the add-on control device efficiency. IDEM evaluation of BACT included:

- (a) Use of low volatility cleaning solvents to limit solvent evaporation during use;
- (b) Work practices for VOC/HAP containing materials to minimize evaporative losses of materials that are not in use;
- (c) Operation of press dryers at a negative pressure relative to the surrounding pressroom to effectively capture of the VOCs volatilized in the drying operations;
- (d) Use of low-VOC, low-volatility fountain solutions to limit evaporative losses and to ensure effective capture of the VOC emissions for control; and
- (e) Operation of a pollution control device that efficiently oxidizes the captured VOCs under all process conditions and also minimizes fuel consumption to limit the generation of greenhouse gases and nitrogen oxides.

In combination with these other control strategies, IDEM believes a control device with a 97% minimum destruction efficiency constitutes BACT, especially considering the fact that IDEM is proposing the use of a regenerative thermal oxidizer, although having a slightly lower destruction efficiency, has a much higher thermal efficiency than recuperative controls, thereby minimizing greenhouse gas and nitrogen oxide emissions.

The destruction efficiency in case of Pollard (US) Ltd. is 98%, which is greater than the proposed 97%. The BACT determination for Pollard is for the operation consisting of gravure and flexographic operations controlled by a catalytic oxidizer, and lithographic printing utilizing UV cured inks. IDEM believes that the control of flexographic and gravure VOC emissions is not comparable to control of VOC emissions from conventional lithographic printing operations and, therefore, IDEM does not believe that the technological feasibility of the proposed control approach should be compared to the Pollard requirements. Permits WI-0084, WI-0140, WI-0153, and WI-0176, mentioned in Table 1, have control efficiencies of 97.5%. However, there are no required capture efficiencies specified for any of the BACT determinations for the permits WI-0084, WI-0140, WI-0153, and WI-0176. WI-0176 contains no emissions limitation (only control efficiency) and WI-0140 states explicitly that it contains no VOC content limitations. Neither WI-0084 nor WI-0153 contains any VOC content limits. (See Tables 1 and 2 of BACT review) In many cases BACT determinations were solely for the control device and do not include any additional limitations on composition of materials, unlike IDEM's proposal, where such limitations have been addressed.

Therefore, IDEM proposes a regenerative thermal oxidizer (Cleanswitch 2) with minimum VOC destruction efficiency of 97% in conjunction with additional limitations on composition of materials as BACT.

VOC Limitations

Although limits on fountain solutions or cleaning solvents have been included in some BACT determinations, many determinations do not impose any such limitations.

Numerous state and local environmental regulations have also been evaluated to determine what emissions limitations have been promulgated in regulations for the lithographic printing process. Regulations reviewed include the following lithography-specific rules, given in Table 3 below:

Table 3 - Numerous state and local environmental regulations

Agency	Regulation	VOC Limits
San Diego County Air Pollution Control District	Rule 67.16	Ink limited to 300g/l VOC. Cleaning solvent limited to a VOC content of less than 200 grams per liter of material or a VOC vapor pressure of 45 mm of Hg at 20°C or less. Fountain solution limited to 15% VOC by volume
South Coast Air Quality Management District	Rule 1171	Solvents for roller wash-step 2, blanket wash, and on-press components limited to VOC content of 800 grams per liter.
South Coast Air Quality Management District	Rule 1130	Fountain solution limited to VOC content of 80 grams per liter.
San Joaquin Valley Unified Air Pollution Control District	Rule 4607	Limits the cleaning solvent to a VOC content of less than 900 grams per liter of material or a VOC vapor pressure of 25 mm of Hg at 20°C or less. Fountain solution limited to 8% VOC by volume.
Delaware	CAP.24.47	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 3% alcohol substitute VOC by volume.
Illinois	35 IAC 218.407 and 35 IAC 219.407	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 5% alcohol substitute VOC by volume.
Massachusetts	310 CMR 7.26	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. No VOC limit for fountain solution, but alcohol prohibited.
Missouri	10 CSR 10-2.340	No limits on cleaning solution. Requires storage of solvents and used towels in closed containers. Fountain solution limited to 10% alcohol substitute VOC by volume.
Missouri	10 CSR 10-5.442	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 5% alcohol substitute VOC by volume.
New Hampshire	Env-A 1204.37	No limits on cleaning solution. Requires storage of solvents and used towels in closed containers. Fountain solution limited to 5% alcohol substitute VOC by volume.
New York	6 §234.3	No limits on cleaning solution. Fountain solution limited to 15% VOC by volume.
Tennessee	1200-3-18-.43	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 4.6% alcohol substitute VOC by volume.
Texas	30 TAC 115.442	Limits the cleaning solvent to a VOC content of less than 50% by weight (70% if using shop towel management processes) or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 3% alcohol substitute VOC by volume.
Virginia	9 VAC 5-40-7820	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Fountain solution limited to 5% alcohol substitute VOC by volume.
Wisconsin	NR 422.142	Limits the cleaning solvent to a VOC content of less than 30% by weight or a VOC vapor pressure of 10 mm of Hg at 20°C or less. Up to 55 gallons per year of noncompliant solvents may be used. Fountain solution limited to 10% alcohol substitute VOC by volume.

The materials limitations proposed for BACT are as follows:

- (a) The VOC content of the fountain solution shall be no greater than 3% VOC as applied;
- (b) The cleanup solvents shall have a vapor pressure no greater than 10 mmHg at 20°C or the VOC content shall be limited to 2.5 lb/gal as applied.

The 3% VOC limit in fountain solution is as stringent as the lithographic printing regulations for these jurisdictions, and are comparable to those included in other BACT determinations. For the cleanup solvents, the limit of 10 mm of Hg at 20°C or less (or) VOC content of 2.5 lb/gal (299 grams/liter) is also as stringent as the lithographic printing regulations for these jurisdictions, and are comparable to those included in other BACT determinations. The source has expressed that it is going to use 10 mm of Hg at 20°C or less limit for cleaning solvents.

Capture Efficiency

The capture efficiencies for the ink oil, fountain solution, and cleaning solvent VOCs are based on the published factors contained in EPA's draft Guideline Series document "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing" and "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 1994). Press emissions will be determined from the combination of VOC usage in each of the process materials, the appropriate retention and/or capture efficiencies, and the destruction efficiency of the oxidizer.

Based on US EPA's "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 1994), the capture efficiencies shall be assumed as follows:

- (1) 100 percent capture, by weight, of the VOC in press ready inks;
- (2) 70 percent capture, by weight, of the VOC in press ready fountain solutions; and
- (3) 40 percent capture, by weight, of the VOC in press ready automatic cleaning solvents.

The press dryers are operated at negative pressure relative to the surrounding pressroom, with all dryer exhaust directed to the thermal oxidizer, to ensure 100% capture of the VOCs resulting from press ready inks. To capture emissions from fountain solution and automatic cleaning solvent, a completely separate capture system would need to be constructed, which is not economically feasible. IDEM is not aware of any requirements (including BACT or LAER determinations) for heatset lithographic printing where a total enclosure has been required and IDEM does not believe such an approach is warranted in this case.

In addition, because the fountain solution and automatic cleaning solvent are applied on the press several feet away from the dryer, obtaining a higher capture efficiency is not practical, since a total enclosure, with a significant increase in exhaust airflow and, therefore, a significant increase in the size of the pollution control system would be required to handle the increased flow. This would also result in significantly lower concentrations at the inlet of the control device, which would negatively impact the destruction efficiency.

The destruction efficiency of 97% in conjunction with the materials proposed for use on the one (1) heatset web press are consistent with the materials that have served as the basis for BACT or LAER at the other printing operations. The most recent LAER determination (IL-0070, March 14, 2001) was based on the use of 97% efficient pollution control device and limitations on the VOC content and/or vapor pressure of the press ready fountain solution and cleaning solvents. The limitations on these materials, namely fountain solution used for the heatset operations, shall be limited to no greater than 3% VOC applied, and cleaning solvent with a vapor pressure limited to 10 mmHg or less at 20 °C or VOC content limited to 2.5 lb/gal.

IDEM proposes that BACT for the one (1) heat set web offset lithographic printing press, identified as Lithoman 2, shall be as follows:

- (a) The exhaust shall be vented to one of the two (2) regenerative thermal oxidizers (Cleanswitch or Cleanswitch 2) with a minimum of 97% destruction efficiency for VOC;
- (b) The VOC content of the fountain solution shall be no greater than 3% VOC as applied;
- (c) The cleanup solvents shall have a vapor pressure no greater than 10 mmHg at 20°C or the VOC content shall be limited to 2.5 lb/gal as applied; and
- (d) The capture efficiencies shall be required, based on US EPA's "Alternative Control Techniques Document: Offset Lithographic Printing" (EPA 453/R-94-054, June 1994)
 - (1) 100 percent capture, by weight, of the VOC in press ready inks;
 - (2) 70 percent capture, by weight, of the VOC in press ready fountain solutions; and
 - (3) 40 percent capture, by weight, of the VOC in press ready automatic cleaning solvents.

Compliance with the above limits and conditions will satisfy the requirements of 326 IAC 8-1-6.