

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY
And
VIGO COUNTY AIR POLLUTION CONTROL**

**Ivy Hill Corporation
4025 3rd Parkway
Terre Haute, Indiana 47804**

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

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

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

Operation Permit No.: F167-13900-00063	
Issued by: George M. Needham, Director Vigo County Air Pollution Control	Issuance Date: 9/30/04 Expiration Date: 9/30/09

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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) and Vigo County Air Pollution Control (VCAPC). 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 an offset lithographic printing plant.

Authorized individual:	Patrick Peak Manager, Safety and Environmental Affairs
Source Address:	4025 3 rd Parkway, Terre Haute, Indiana 47804
Mailing Address:	4325 Sheperdsville Road, Louisville, Kentucky 40218
General Source Phone:	812-466-9851
SIC Code:	2752
Source Location Status:	Vigo
Source Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Nonattainment NSR; 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) Heidelberg offset lithographic printing press (Model CD102-7+LX) which is identified as press 7C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 1996.
- (b) One (1) Planeta offset lithographic printing press (Model P74-6) which is identified as press 6C56. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 1998.
- (c) One (1) Planeta offset lithographic printing press (Model RA-105-6+L) which is identified as press 6C41. This press has a maximum line speed of 833 feet per minute and a maximum width of forty-one (41) inches. This press was installed in 1999.
- (d) One (1) Planeta offset lithographic printing press (Model RA-142-6+L-ALV) which is identified as press 6C56-2. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 2001.
- (e) One (1) Heidelberg offset lithographic printing press (Model CD102-6+LX) which is identified as press 6C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 2002.
- (f) One (1) Puhl paper collector/baler which was installed in 1991.

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) Two (2) Weil-McClain Model 94 Boilers which are identified as Boiler #1 and Boiler #2. Each boiler has a rated heat input capacity of 6.856 MMBTU/Hr and was installed in 2002.
- (b) One (1) Pre-press activities which are listed as having a small amount of VOC emissions.
- (c) Two (2) Parts Cleaners which are listed as having a small amount of VOC emissions.

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

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

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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

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)][326 IAC 2-1.1-9.5]

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

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

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

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 Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, and VCAPC within a reasonable time, any information that IDEM, OAQ, and VCAPC 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). Upon request, the Permittee shall also furnish to IDEM, OAQ, and VCAPC copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, and VCAPC the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1 when furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ and VCAPC 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 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

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

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (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, and VCAPC on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and VCAPC 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.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and VCAPC upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and VCAPC. IDEM, OAQ, and VCAPC may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.13 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 and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;
- IDEM, OAQ**
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

and

VCAPC

Telephone No.: 812-462-3433
Facsimile No.: 812-462-3447

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

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). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ and VCAPC, 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 and VCAPC, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

B.14 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 Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

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

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

B.15 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 or VCAPC 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 or VCAPC, 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 or VCAPC, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or VCAPC, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 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 VCAPC 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).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (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, and VCAPC on or before the date it is due.
 - (2) If IDEM, OAQ and VCAPC 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 and VCAPC takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to

submit by the deadline specified in writing by IDEM, OAQ and VCAPC, any additional information identified as needed to process the application.

B.17 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

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

(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)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

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 and VCAPC, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

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

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-17-3-2][IC13-30-3-1]

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

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

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

B.21 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The application 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).

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

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

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

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

C.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.

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.

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

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

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

Except as otherwise provided by statute, rule or 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 unit vented to the control equipment is in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by 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 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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 to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.9 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 and VCAPC.

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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

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 and VCAPC 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 and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and VCAPC, if the Permittee submits to IDEM, OAQ and VCAPC a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

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 and VCAPC, 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 and VCAPC, 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]

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

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred 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 response action documents submitted pursuant to this condition do 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.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or VCAPC makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or VCAPC within a reasonable time.

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

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (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, and VCAPC on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

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

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) Heidelberg offset lithographic printing press (Model CD102-7+LX) which is identified as press 7C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 1996.
- (b) One (1) Planeta offset lithographic printing press (Model P74-6) which is identified as press 6C56. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 1998.
- (c) One (1) Planeta offset lithographic printing press (Model RA-105-6+L) which is identified as press 6C41. This press has a maximum line speed of 833 feet per minute and a maximum width of forty-one (41) inches. This press was installed in 1999.
- (d) One (1) Planeta offset lithographic printing press (Model RA-142-6+L-ALV) which is identified as press 6C56-2. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 2001.
- (e) One (1) Heidelberg offset lithographic printing press (Model CD102-6+LX) which is identified as press 6C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 2002.

(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 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6] [326 IAC 2-8-4] [326 IAC 2-1.1-5]

- (a) The source shall not exceed a total of 96 tons of VOC being fed to the emissions units combined (presses 7C40, 6C56, 6C41, 6C56-2, and 6C40) per 12 consecutive months with compliance determined at the end of each month. Compliance with this limit renders 326 IAC 2-7 and 2-1.1-5 not applicable.
- (b) The total VOC usage of UV coatings, blanket/roller washes, inks, fountain additives, isopropanol, cleaning materials, clean up solvents, alcohol substitute, and other coatings being fed to each emissions unit (presses 7C40, 6C56, 6C41, 6C56-2, and 6C40) shall not exceed 24 tons per 12 consecutive months with compliance demonstrated at the end of each month. Therefore 326 IAC 8-1-6 does not apply.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]

The source shall not exceed 9 tons of any single HAP usage per 12 consecutive months with compliance demonstrated at the end of each month, nor shall the source exceed 24 tons of any combination of HAPs per 12 consecutive months with compliance demonstrated at the end of each month. Therefore 326 IAC 2-7 does not apply.

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

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

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC)

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) by tracking all VOC input (including but not limited to inks, solvents, additives, and clean-up solvents) by press. This data shall be compiled monthly and added to the previous 11 months to generate a 12-consecutive month total VOC fed to each press. IDEM, OAQ, and VCAPC, reserve the authority to determine

compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.5 Hazardous Air Pollutants (HAPs)

Compliance with the HAP usage limitations contained in Condition D.1.2 shall be determined by tracking HAP usage monthly. Monthly data shall be added to the previous 11 months to generate a 12-consecutive month total HAP usage.

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

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, 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 established in Condition D.1.1.
- (1) The VOC content (weight percentage) of each material used per press.
 - (2) The amount of each material used less water on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records of HAP usage for each month. Records shall be complete and sufficient to establish compliance with the HAP usage limits established in condition D.1.2.
- (c) To document compliance with Condition D.1.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: One (1) Puhl paper collector/baler which was installed in 1991. (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.2.1 Particulate (PM) [326 IAC 6-1-2] [326 IAC 2-2] [326 IAC 2-8]

- (a) Pursuant to 326 IAC 6-1-2 particulate matter (PM) emissions from the offset printing plant shall be limited to no greater than 0.03 grain per dscf air flow.
- (b) The Permittee shall not exceed 40,000 tons of paper being fed to the collector/baler per 12 consecutive months with compliance determined at the end of each month.
- (c) The PM/PM10 emission rate shall not exceed 4.8 lbs of PM/PM10 per ton of paper fed to the collector/baler. Based on a maximum of 40,000 tons of paper, this is equivalent to 22.22 lbs of PM/PM10 per hour.

Therefore, the combined limits of D.2.1(b) and D.2.1(c) make 326 IAC 2-2 and 326 IAC 2-7 not applicable.

D.2.2 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 this facility and its control device.

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

D.2.3 Particulate Control

In order to comply with condition D.2.1, the cyclones for particulate control shall be in operation and control emissions from the paper collector/baler at all times that the collector/baler is in operation.

D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.2.1(c), the Permittee shall perform PM/PM10 testing on the paper collector/baler within 180 days of permit issuance utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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

D.2.5 Cyclone Inspections

An external inspection shall be performed each calendar quarter of all cyclones controlling the collector/baler operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.2.6 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency

and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.7 Visible Emissions Notations

- (a) Visible emission notations of the cyclone stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1(b), the Permittee shall maintain records of the amount of paper fed to the paper collector/baler each month.
- (b) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.5 and the dates the vents are redirected.
- (c) To document compliance with Condition D.2.2, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) To document compliance with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the cyclone stack exhaust once per shift.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (a) Two (2) Weil-McClain Model 94 Boilers which are identified as Boiler #1 and Boiler #2. Each boiler has a rated heat input capacity of 6.856 MMBTU/Hr and was installed in 2002.
- (b) Two (2) Parts Cleaners which are listed as having a small amount of VOC emissions.
(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.3.1 Particulate [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Particulate Emissions) particulate emissions (PM) from each of the offset printing plant's boilers shall not exceed 0.01 grain per dry standard cubic foot (dscf).

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

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

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

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)),

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

AND VIGO COUNTY AIR POLLUTION CONTROL

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

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

AND

**VIGO COUNTY AIR POLLUTION CONTROL
103 South 3rd Street
Terre Haute, Indiana 47807
Phone: 812-462-3433
Fax: 812-462-3447**

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

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and Vigo County Air Pollution Control (VCAPC) at 812-462-3433
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967) (VCAPC Facsimile Number: 812-462-3447), and follow the other requirements of 326 IAC 2-7-16

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

A certification is not required for this report.

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

AND

VIGO COUNTY AIR POLLUTION CONTROL

**FESOP Usage Report
 Submit Report Quarterly**

Source Name: Ivy Hill Corporation
 Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
 Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
 FESOP No.: 167-13900-00063
 Facility: Individual Presses
 Parameter: VOC fed to individual printing presses
 Limit: 24 tons per year per press (rolled monthly)

YEAR: _____

Press	Tons VOC this month	Tons VOC last 12 months
7C40		
Month		
Month		
Month		
6C56		
Month		
Month		
Month		
6C41		
Month		
Month		
Month 3		
6C56-2		
Month 1		
Month 2		
Month 3		
6C40		
Month 1		
Month 2		
Month 3		

- No deviation occurred in this month.
- Deviation/s occurred in this month.
 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**

AND

VIGO COUNTY AIR POLLUTION CONTROL

FESOP Quarterly Report

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063
Facility: Printing Presses Combined
Parameter: VOC Emissions
Limit: 96 tons per year total plant (rolled monthly)

YEAR: _____

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

AND

VIGO COUNTY AIR POLLUTION CONTROL

Combined HAP Report Form
Submit Report Quarterly

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063
Facility: Entire Source
Parameter: Combined HAP Emissions
Limit: 24 tons per year total plant (rolled monthly)

YEAR: _____

Month	Tons Combined HAPs Total Source This Month	Tons Combined HAPs Last 12 Months Total Source

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

AND

VIGO COUNTY AIR POLLUTION CONTROL

Single HAP Report Form
Submit Report Quarterly

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063
Facility: Entire Source
Parameter: HAP emissions differentiated by specific HAP
Limit: 9 tons per year total plant (rolled monthly) each

YEAR: _____

Month	Tons Ethylene Glycol Monthly/Last 12 Months	Tons Glycol Ethers Monthly/Last 12 Months	Tons Other (Spec) Monthly/Last 12 Months
	/	/	/
	/	/	/
	/	/	/

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

AND

VIGO COUNTY AIR POLLUTION CONTROL

FESOP Quarterly Report

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063
Facility: Collector/baler
Parameter: PM and PM10
Limit: Fixed monthly limit of 8.0 tons emitted each

YEAR: _____

Month	Pounds fed to baler	Pounds PM Emitted	Pounds PM10 Emitted

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

And

VIGO COUNTY AIR POLLUTION CONTROL

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

Source Name: Ivy Hill Corporation
Source Address: 4025 3RD Parkway, Terre Haute, Indiana 47804
Mailing Address: 4325 Sheperdsville Road, Louisville, Kentucky 40218
FESOP No.: 167-13900-00063

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality
And Vigo County Air Pollution Control**

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

Source Background and Description

Source Name:	Ivy Hill Corporation
Source Location:	4025 3rd Parkway, Terre Haute, IN 47804
County:	Vigo
SIC Code:	2752
Operation Permit No.:	167-6257-00063
Operation Permit Issuance Date:	December 13, 1996
Permit Renewal No.:	167-13900-00063
Permit Reviewer:	Scott Sines

The Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) have reviewed a FESOP renewal application from Ivy Hill Corporation relating to the operation of an offset lithographic printing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) Heidelberg offset lithographic printing press (Model CD102-7+LX) which is identified as press 7C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 1996.
- (b) One (1) Planeta offset lithographic printing press (Model P74-6) which is identified as press 6C56. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 1998.
- (c) One (1) Planeta offset lithographic printing press (Model RA-105-6+L) which is identified as press 6C41. This press has a maximum line speed of 833 feet per minute and a maximum width of forty-one (41) inches. This press was installed in 1999.
- (d) One (1) Planeta offset lithographic printing press (Model RA-142-6+L-ALV) which is identified as press 6C56-2. This press has a maximum line speed of 778 feet per minute and a maximum width of fifty-six (56) inches. This press was installed in 2001.
- (e) One (1) Heidelberg offset lithographic printing press (Model CD102-6+LX) which is identified as press 6C40. This press has a maximum line speed of 583 feet per minute and a maximum printing width of forty (40) inches. This press was installed in 2002.
- (f) One (1) Puhl paper collector/baler which was installed in 1991.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) Weil-McClain Model 94 Boilers which are identified as Boiler #1 and Boiler #2. Each boiler has a rated heat input capacity of 6.856 MMBTU/Hr and were installed in 2002.
- (b) One (1) Pre-press activities which are listed as having a small amount of VOC emissions.
- (c) Two (2) Parts Cleaners which are listed as having a small amount of VOC emissions.

Existing Approvals

The source has been operating under the previous FESOP 167-6257-00063 issued on December 13, 1996, with an expiration date of December 13, 2001, and the following amendments and revisions:

- (a) First Significant Revision 167-9592-00063 issued on May 18, 1998,
- (b) First Administrative Amendment 167-10732-00063 issued on May 7, 1999, and
- (c) Second Administrative Amendment 167-14298-00063 issued on May 11, 2001.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively complete FESOP renewal application for the purposes of this review was received on February 7, 2001. Additional information was received on January 2, 2002 for a proposed Administrative Amendment (167-15447-00063). This information will be included in this FESOP renewal.

Emission Calculations

See Appendix A, pages 1 - 7 of this document for detailed emission calculations.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	greater than 100, but less than 250
PM-10	greater than 100, but less than 250
SO ₂	less than 100
VOC	greater than 100, but less than 250
CO	less than 100
NO _x	less than 100

HAPs	Unrestricted Potential Emissions (tons/yr)
Glycol Ethers	greater than 25
Ethylene Glycol	greater than 25
Total	greater than 25

The unrestricted potential emissions of pollutants are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
All Printing Presses (including solvents)	-	-	-	96	-	-	23
Paper Collector/Baler	96	96	-	-	-	-	-
Combined Insignificant	3	3	-	3	-	-	1
Total Emissions	99	99	-	99	-	-	24

The VOC emissions from each printing press shall be limited to less than twenty-four (24) tons per twelve (12) consecutive month period. Therefore the requirement in 326 IAC 8-1-6 does not apply. The VOC emissions from all of the printing presses combined shall be limited to less than ninety-six (96) tons per twelve (12) consecutive month period. Therefore the requirements of 326 IAC 2-7 do not apply.

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
1-hr Ozone	attainment
8-hr Ozone	basic nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Vigo County has been classified as attainment or unclassifiable for all other 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 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, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	99*
PM-10	99*
SO ₂	-
VOC	99*
CO	-
NO _x	-
Single HAP	9*
Combination HAPs	24*

* These emissions are all limited by the existing FESOP and by this renewal.

- (a) This existing source is not a major stationary source with regards to Prevention of Significant Deterioration (PSD) because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

- (b) This existing source is not a major stationary source with regards to nonattainment New Source Review (NSR) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater.
- (c) This existing source is not a major stationary source because no criteria pollutant is emitted at a rate of 100 tons per year, nor are HAPs emitted at a rate of 10 tons per year or greater for a single HAP or 25 tons per year or greater for any combination of HAPs.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) applicable to this source. 40 CFR Part 60 Subpart QQ does not apply because the presses are offset and are not rotogravure.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart KK or (326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source. This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for two reasons. First, the limitations in this FESOP limit the HAP emissions to below the major source threshold. Second, offset printing is not one of the listed printing processes covered by this Subpart (publication rotogravure, product or packaging rotogravure, or wide web flexographic are the kinds specifically mentioned).
- (c) The source does not operate a pollutant-specific emissions unit as defined in 40 CFR 64.1 for VOC with the potential to emit before controls an amount equal to or greater than the major source threshold for VOC. Therefore the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability – Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on December 5, 1997. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

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

The source is a properly permitted existing source and has not applied to construct any new facilities. The source was constructed in 1995, was a minor source under PSD at the time of construction, is not one of the twenty-eight listed sources, and has not performed any modifications to the source that were individually major since construction. The source remains under the emission limits set forth by 326 IAC 2-2. Therefore it is a minor source and PSD requirements do not apply.

326 IAC 2-1.1-5 (Nonattainment New Source Review (NSR))

326 IAC 2-1.1-5 clarifies that IDEM cannot issue a permit or modification that will cause or contribute to a violation of the National Air Quality Standards (NAAQS). Vigo County has been designated as nonattainment for the 8-hour ozone standard. Therefore condition D.1.1 was changed to clarify that the limit is making all (state and federal) nonattainment NSR rules not applicable.

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

This source has been in operation and has been operating under applicable permits prior to July 27, 1997. The source shall not emit any single HAP in excess of 9 tons per 12 consecutive months or any combination of HAPs in excess of 24 tons per 12 consecutive months. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Revisions to 326 IAC 2-6 (Emission Reporting) became effective March 27, 2004. The Permittee is no longer required to submit an emission statement; therefore the emission statement will be removed from the permit.

326 IAC 2-8 (VOC, HAP, PM/PM10 Emissions Limitations)

Pursuant to 326 IAC 2-8-4 the source shall not exceed the following emissions limitations:

- (a) The source shall not exceed a total of 96 tons VOC usage for the emissions units combined (presses 7C40, 6C56, 6C41, 6C56-2, and 6C40) per 12 consecutive months with compliance demonstrated at the end of each month. The the total VOC usage of UV coatings, blanket/roller washes, inks, fountain additives, isopropanol, cleaning materials, clean up solvents, alcohol substitute, and other coatings for each emissions unit (presses 7C40, 6C56, 6C41, 6C56-2, and 6C40) shall not exceed 24 tons per 12 consecutive months with compliance demonstrated at the end of each month.
- (b) The source shall not exceed 9 tons of any single HAP usage per 12 consecutive months with compliance demonstrated at the end of each month, nor shall the source exceed 24 tons of any combination of HAPs per 12 consecutive months with compliance demonstrated at the end of each month.
- (c) To remain within the 96 tons per year PM/PM10 limits, the source shall not exceed 40,000 tons of paper being fed to the collector/baler per 12 consecutive months with compliance demonstrated at the end of each month based on 4.8 lbs of PM/PM10 per ton of paper fed to the collector/baler.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-1-2 (Particulate Emissions)

Because Vigo County is listed under 326 IAC 6-1-7, particulate emitting units are subject to the requirements of 326 IAC 6-1-2. 326 IAC 6-1-2 establishes emission limits for general particulate emission facilities. Pursuant to 326 IAC 6-1-2(b)(3) particulate emissions (PM) from the offset printing plant's boilers shall not exceed 0.01 grain per dry standard cubic foot (dscf).

Pursuant to 326 IAC 6-1-2(a) particulate matter (PM) emissions from the offset printing plant's paper collector/baler shall be limited to no greater than 0.03 grain per dscf which is equivalent to 123.89 tons per year of PM. To remain within FESOP limits the source shall not exceed 96 tons per year with compliance demonstrated at the end of each month. Therefore the requirements of 326 IAC 2-7 do not apply.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 8-1-6 all new facilities built after January 1, 1980 and with potential VOC emissions in excess of 25 tons per year, not subject to some other part of article 8, is subject to BACT review. Each emissions unit (since they were all installed at different times) is limited to 24 tons of VOC emissions per 12 consecutive month period, which renders 326 IAC 8-1-6 not applicable.

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

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

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

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

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

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a

temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
- (B) A water cover when solvent is used is insoluble in, and heavier than, water.
- (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

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

- (1) Close the cover whenever articles are not being handled in the degreaser.
- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

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

Ivy Hill Corporation is not subject to this rule as they utilize offset lithographic printing processes. 326 IAC 8-5-5 only applies to flexographic, packaging rotograure, and publication rotogravure printing operations.

Testing Requirements

PM/PM10 emissions from the paper collector/baler are limited to 4.8 lbs of PM/PM10 per ton of paper fed to the collector/baler based on a maximum of 3,333 tons of paper per month (22.22 lbs of PM/PM10 per hour) to remain within FESOP limits. In order to document PM/PM10 emission rates, the Permittee will be required to conduct a stack test of the emission rate within 180 days of permit issuance and approximately once every five (5) years thereafter.

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 and VCAPC, 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 in 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.

The compliance monitoring requirements applicable to this renewal are as follows:

1. The cyclone has applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of the cyclone stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

- (b) An external inspection shall be performed each calendar quarter of all cyclones controlling the collector/baler operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal condition is observed.

These monitoring conditions are necessary because the cyclone for controlling the paper collector/baler must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emissions) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this offset lithographic printing plant shall be subject to the conditions of the FESOP 167-13900-00063.

Appendix A: Emissions Calculations

VOC From Printing Press Operations

Company Name: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Pit ID: 167-00063
Reviewer: Scott Sines
Date: 4/23/2004

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
6C40	583.3	40	147160

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin ²)	Weight % Volatiles*	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
UV Coating	0.6745	9%	100.00%	147160	4.22
Blanket/Roller Wash	0.1608	100%	100.00%	147160	11.83
Ink (69335)	0.0536	4%	100.00%	147160	0.14
Ink (69336)	0.0536	4%	100.00%	147160	0.15
Ink (69337)	0.0536	3%	100.00%	147160	0.13
Ink (67519)	0.0536	5%	100.00%	147160	0.18
Ink (69334)	0.0536	6%	100.00%	147160	0.22
Fountain Additive (HDA 61)	0.032	90%	100.00%	147160	2.11
Fountain Additive (Pressmax 20)	0.0371	0%	100.00%	147160	0.00
		0%	0.00%	147160	0.00

Total VOC Emissions =	18.99 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium 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%. 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

VOC From Printing Press Operations

Company Name: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Pit ID: 167-00063
Reviewer: Scott Sines
Date: 4/23/2004

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
6C41	833.4	41	215513

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin ²)	Weight % Volatiles*	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
UV Coating	0.6754	9%	100.00%	215513	6.55
Isopropanol	0.1179	100%	100.00%	215513	12.70
Blanket/Roller Wash	0.1608	100%	100.00%	215513	17.33
Ink	0.0447	0%	100.00%	215513	0.00
Ink	0.0447	0%	100.00%	215513	0.00
Ink	0.0447	4%	100.00%	215513	0.21
Ink	0.0447	0%	100.00%	215513	0.00
Ink	0.0447	0%	100.00%	215513	0.00

Total VOC Emissions =	36.80 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium 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%. 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

VOC From Printing Press Operations

Company Name: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Pit ID: 167-00063
Reviewer: Scott Sines
Date: 4/23/2004

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
6C56	777.8	56	274721

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin ²)	Weight % Volatiles*	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
UV Coating	0.6754	9%	100.00%	274721	8.35
Isopropanol	0.1179	100%	100.00%	274721	16.19
Blanket/Roller Wash	0.1608	100%	100.00%	274721	22.09
UV Ink (Highest VOC)	0.0447	4%	100.00%	274721	0.25

Total VOC Emissions =	46.88 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium 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%. 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

VOC From Printing Press Operations

Company Name: Ivy Hill Corporation
 Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
 Permit Number: 167-13900-00063
 Pit ID: 167-00063
 Reviewer: Scott Sines
 Date: 4/23/2004

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
6C56-2	777.8	56	274721

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin ²)	Weight % Volatiles*	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
UV Coating	0.6754	9%	100.00%	274721	8.35
Blanket/Roller Wash	0.1608	100%	100.00%	274721	22.09
Ink (69356)	0.0447	0%	100.00%	274721	0.01
Ink (69357)	0.0447	0%	100.00%	274721	0.00
Ink (69359)	0.0447	0%	100.00%	274721	0.00
Ink (69360)	0.0447	4%	100.00%	274721	0.27
Ink (69362)	0.0447	0%	100.00%	274721	0.00
Ink (69363)	0.0447	0%	100.00%	274721	0.00
Fountain Additive (HAD 61)	0.032	90%	100.00%	274721	3.94
Fountain Additive (HDF 52)	0.0371	0%	100.00%	274721	0.00
Cleaning Material	0.0093	13%	100.00%	274721	0.17
		0%	0.00%	274721	0.00

Total VOC Emissions =	34.82 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

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%. 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

VOC From Printing Press Operations

Company Name: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Pit ID: 167-00063
Reviewer: Scott Sines
Date: 4/23/2004

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin ² /YEAR
7C40	583.3	40	147160

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin ²)	Weight % Volatiles*	Flash Off %	Throughput (MMin ² /Year)	Emissions (TONS/YEAR)
Inks	0.025	3%	0.00%	147160	0.00
Blanket/Roller Wash	0.015	100%	100.00%	147160	1.10
Solvent - Clean up	0.0034	100%	100.00%	147160	0.25
Alcohol substitute	0.0051	98%	79.00%	147160	0.29
Coating	0.063	60%	10.90%	147160	0.30
		0%	0.00%	147160	0.00

Total VOC Emissions =	1.95 Ton/yr
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*VOC (Tons/Year) = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maxium 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%. 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: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Plt ID: 167-00063
Reviewer: Scott Sines
Date: 4/26/2004

Boilers #1 & #2
Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

13.8

120.9

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.1	0.5	0.0	6.0	0.3	5.1

*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

gasc99.xls 9/95

See page 2 for HAPs emissions calculations.

updated 4/99

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

Company Name: Ivy Hill Corporation
Address City IN Zip: 4025 3rd Parkway, Terre Haute, IN 47804
Permit Number: 167-13900-00063
Pit ID: 167-00063
Reviewer: Scott Sines
Date: 4/26/2004

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.269E-04	7.253E-05	4.533E-03	1.088E-01	2.055E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.022E-05	6.649E-05	8.462E-05	2.297E-05	1.269E-04

Methodology is the same as page 1.

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