



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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TO: Interested Parties / Applicant

DATE: November 7, 2008

RE: R.R. Donnelley & Sons / 107-23664-00052

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

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

R. R. Donnelley & Sons Company
1009 Sloan Street
Crawfordsville, Indiana 47933

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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.: T 107-23664-00052	
Original signed by: Chrystal Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 7, 2008 Expiration Date: November 7, 2013

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1, A.3, and A.4 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 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a book printing and binding source.

Source Address:	1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address:	1009 Sloan Street, Crawfordsville, Indiana 47933
General Source Phone Number:	765 – 364 – 2787
SIC Code:	2732
County Location:	Montgomery
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This book printing and binding source consists of two (2) plants:

- (a) North Plant is located at 1009 Sloan St., Crawfordsville, IN; and
- (b) South Plant is located at State Road 32 West, Crawfordsville, IN.

These two (2) plants are located adjacent to each other, separated by a public road and a railroad right of way, have the same SIC codes and are owned by one (1) company. Therefore, they will be considered one (1) major source, as defined by 326 IAC 2-7-1(22).

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

North Plant:

- (a) Four (4) natural gas-fired boilers, each capable of combusting propane as backup, heat input capacity: 20.9 million British thermal units per hour, each, described as follows:
 - (1) Boiler #1(N), constructed in 1956, exhausting through stack SB-4A(N).
 - (2) Boiler #2(N), constructed in 1956, exhausting through stack SB-4B(N).
 - (3) Boiler #3(N), constructed in 1962, exhausting through stack SB-4C(N).
 - (4) Boiler #4(N), constructed in 1972, exhausting through stack SB-4D(N).
- (b) One (1) natural gas-fired boiler, identified as Boiler #5(N), constructed in 1975, combusting propane as backup, exhausting through stack SB-4E(N), heat input capacity: 2.56 million British thermal units per hour.

- (c) Four (4) paper trimming and baling processes, process weight rate: 4 tons of paper trim per hour, each, described as follows:
 - (1) Paper Trim #1(N), controlled by Paper Trim Cyclone #1(N), exhausting through stack SBP-5H(N).
 - (2) Paper Trim #2(N), controlled by Paper Trim Cyclone #2(N), exhausting through stack SBP-5I(N).
 - (3) Paper Trim #3(N), controlled by Paper Trim Cyclone #3(N), exhausting through stack SBP-5J(N).
 - (4) Paper Trim #4(N), controlled by Paper Trim Cyclone #4(N), exhausting through stack SBP-5K(N).
- (d) Two (2) Paper Dust Collectors:
 - (1) Dust Collector #1(N) consists of a baghouse for particulate control and is exhausted through SD-6A(N).
 - (2) Dust Collector #2(N) consists of a baghouse for particulate control and is exhausted through SD-6B(N).
- (e) One (1) Mitsubishi web offset lithographic printing press, identified as Press 268, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, exhausting to vent SP-5AA(N) in nonheatset mode, with two (2) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (f) One (1) Toshiba web offset lithographic printing press, identified as Press 269, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, exhausting through vent SP-5BB(N) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (g) One (1) Hantscho web offset lithographic printing press, identified as Press 240, constructed in 1988, exhausting through stack SP-5R(N), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (h) One (1) KBA Compacta web offset lithographic printing press, identified as Press 281, constructed in 1991, exhausting through stack SP-5S(N), with two (2) units and two (2) webs, maximum line speed: 1,100 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (i) One (1) Hantscho web offset lithographic printing press, identified as Press 245, constructed in 1989, exhausting through stack SP-5Q(N), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or

nonheatset mode.

- (j) One (1) Timson web offset lithographic printing press, identified as Press 242, constructed in 1995, exhausting through stack SP-5Z(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (k) One (1) Timson web offset lithographic printing press, identified as Press 243, constructed in 1995, exhausting through stack SP-5AA(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (l) One (1) Harris web offset lithographic printing press, identified as Press 285, constructed in 1976, exhausting through stack SP-5K(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (m) One (1) Harris web offset lithographic printing press, identified as Press 286, constructed in 1979, exhausting through stack SP-5L(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (n) One (1) Harris web offset lithographic printing press, identified as Press 287, constructed in 1979, exhausting through stack SP-5M(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (o) One (1) Harris web offset lithographic printing press, identified as Press 288, constructed in 1979, exhausting through stack SP-5N(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (p) One (1) Harris web offset lithographic printing press, identified as Press 289, constructed in 1984, exhausting through stack SP-5O(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (q) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 232, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches, including five (5) units and coater.
- (r) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 233, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches, including five (5) units and coater.
- (s) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 238, constructed in 1990, exhausting through stack SP-5V(N), maximum line speed: 434 feet per minute, maximum printing width: 40 inches, including six (6) units and coater.

- (t) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 239, constructed in 1992, exhausting through stack SP-5W(N), maximum line speed: 473 feet per minute, maximum printing width: 40 inches, including two (2) units and coater.

South Plant:

- (u) Three (3) natural gas-fired boilers, combusting propane as backup, heat input capacity: 25.1 million British thermal units per hour, each, described as follows:
 - (1) Boiler #1(S), constructed in 1964, exhausting through stack SB-4A(S).
 - (2) Boiler #2(S), constructed in 1964, exhausting through stack SB-4B(S).
 - (3) Boiler #3(S), constructed in 1975, exhausting through stack SB-4C(S).
- (v) Four (4) paper trimming and baling processes, each constructed in 1976, process weight rate: 4 of paper trim tons per hour, each, described as follows:
 - (1) Paper Trim #1(S), controlled by Paper Trim Cyclone #1(S), exhausting through stack SBP-5E(S).
 - (2) Paper Trim #2(S), controlled by Paper Trim Cyclone #2(S), exhausting through stack SBP-5E(S).
 - (3) Paper Trim #3(S), controlled by Paper Trim Cyclone #3(S), exhausting through stack SBP-5E(S).
 - (4) Paper Trim #4(S), controlled by Paper Trim Cyclone #4(S), exhausting through stack SBP-5E(S).
- (w) One (1) Paper Dust Collector:
 - (1) Dust Collector #1(S) consists of two (2) cyclones each followed by a baghouse (2 total) for particulate control and are exhausted through SD-6A(S) and new exhaust point SD6C(S).
- (x) One (1) Mitsubishi web offset lithographic printing press, identified as Press 262, constructed in 1992, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5N(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (y) One (1) Hantscho web offset lithographic printing press, identified as Press 270, constructed in 1979, exhausting through stack SP-5F(S), with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (z) One (1) Cottrell web offset lithographic printing press, identified as Press 272, constructed in 1973, exhausting through stack SP-5D(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (aa) One (1) Mitsubishi web offset lithographic printing press, identified as Press 273, constructed in 1991, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5L(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,615 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (bb) One (1) Cottrell web offset lithographic printing press, identified as Press 276, constructed in 1976, exhausting through stack SP-5E(S), with four (4) units and two (2) webs, maximum line speed: 1,200 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (cc) One (1) Toshiba web offset lithographic printing press, identified as Press 260, constructed in 1986, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5I(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,615 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (dd) One (1) Toshiba web offset lithographic printing press, identified as Press 261, constructed in 1987, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5J(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,500 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ee) One (1) Hantscho web offset lithographic printing press, identified as Press 290, constructed in 1984, exhausting through stack SP-5G(S), with one (1) unit and one (1) web, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ff) One (1) Hantscho web offset lithographic printing press, identified as Press 291, constructed in 1984, exhausting through stack SP-5H(S), with four (4) units and two (2) webs, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (gg) One (1) Hantscho web offset lithographic printing press, identified as Press 293, constructed in 1989, exhausting through stack SP-5K(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (hh) One (1) Hantscho web offset lithographic printing press, identified as Press 294, constructed in 1991, exhausting through stack SP-5M(S), with four (4) units and two (2) webs, maximum line speed: 1,076 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (ii) One (1) Hantscho web offset lithographic printing press, identified as Press 295, constructed in 1993, exhausting through stack SP-5P(S), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (jj) One (1) Harris web offset lithographic printing press, identified as Press 296, constructed in 1994, exhausting through stack SP-5Q(S), with two (2) units and two (2) webs, maximum line speed: 860 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (kk) One (1) Heidelberg sheetfed offset lithographic press, identified as Press 258, constructed in 1995, exhausting through stack SP-5R(S), maximum line speed: 505 feet per minute, maximum printing width: 40.5 inches, including six (6) units and coater.
- (ll) One (1) coating operation used for edge staining paper, identified as In-line Stainer 192, constructed in 1993, utilizing HVLP spray coating, utilizing dry filters for overspray control and exhausting through stack BS-4X(N).
- (mm) One (1) nonheatset, sheetfed, offset lithographic printing press, identified as Press 250, constructed in 2006, exhausting through stack SP-5U(S), capacity: 13,000 sheets per hour; 1,120 square inches per sheet.
- (nn) One (1) Goss web offset lithographic printing press, identified as Press 210, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7C(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (oo) One (1) Goss web offset lithographic printing press, identified as Press 211, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting to stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7E(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (pp) One (1) Goss web offset lithographic printing press, identified as Press 212, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7G(S) in nonheatset mode, maximum line speed: 2,433 feet per minute maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (qq) One (1) Goss web offset lithographic printing press, identified as Press 213, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7H(S) in nonheatset mode, maximum line speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset

mode.

- (rr) One (1) Goss web offset lithographic printing press, identified as Press 214, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7F(S), maximum line speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ss) One (1) Timson web offset lithographic printing press, identified as Press 215, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7D(S) in nonheatset mode, maximum line speed: 1,700 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (tt) One (1) nonheatset, sheet-fed, offset lithographic printing press, identified as Press 251, constructed in 2007, with a maximum capacity of 18,000 sheets (17.84 million square inches) per hour, exhausting to stack SP-7J(s).

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source does not currently have any specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21), that have applicable requirements.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 Permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- (a) This permit, T 107-23664-00052, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-7-7]

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

B.5 Severability [326 IAC 2-7-5(5)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (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 the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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 "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) 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.
 - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compli-

ance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T 107-23664-00052 and issued pursuant to permitting programs approved into the state implementation plan have been either:

- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this Part 70 Operating Permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable

requirement. [326 IAC 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. 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 "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c),

or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 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 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 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 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [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) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

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

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]

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

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

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

C.6 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. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least two hundred sixty (260) linear feet on pipes or one hundred sixty (160) square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 seventy-five hundredths (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 2-7-6(1)]

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling)

Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

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

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on June 21, 2002.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [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 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range,

designated condition, or below the applicable emission limitation or standard, as applicable.

- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a “project” (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit other than a project at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee)) and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr)), the Permittee shall comply with the following:
- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
- (i) Baseline actual emissions;
- (ii) Projected actual emissions;
- (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii); and
- (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (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 "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the record keeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx)), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 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 2-7-5(15)]: Boilers

North Plant:

- (a) Four (4) natural gas-fired boilers, each combusting propane as backup, heat input capacity: 20.9 million British thermal units per hour, each, described as follows:
- (1) Boiler #1(N), constructed in 1956, exhausting through stack SB-4A(N).
 - (2) Boiler #2(N), constructed in 1956, exhausting through stack SB-4B(N).
 - (3) Boiler #3(N), constructed in 1962, exhausting through stack SB-4C(N).
 - (4) Boiler #4(N), constructed in 1972, exhausting through stack SB-4D(N).
- (b) One (1) natural gas-fired boiler, identified as Boiler #5(N), constructed in 1975, capable of combusting propane as backup, exhausting through stack SB-4E(N), heat input capacity: 2.56 million British thermal units per hour.

South Plant:

- (u) Three (3) natural gas-fired boilers, each combusting propane as backup, heat input capacity: 25.1 million British thermal units per hour, each, described as follows:
- (1) Boiler #1(S), constructed in 1964, exhausting through stack SB-4A(S).
 - (2) Boiler #2(S), constructed in 1964, exhausting through stack SB-4B(S).
 - (3) Boiler #3(S), constructed in 1975, exhausting through stack SB-4C(S).

(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 2-7-5(1)]

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

- (a) Pursuant to 326 IAC 6-2-3(b), particulate emissions limitations for the six (6) boilers identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #1(S), Boiler #2(S), which were existing and in operation on or before June 8, 1972, shall be calculated by the following equation:

$$P_t = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

P_t = lbs of PM emitted per MMBtu heat input

C = maximum ground level concentration (default = 50 ug/m³)

a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)

h = stack height in feet

Q = total source maximum operating capacity

N = number of stacks in fuel burning operation

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 34}{76.5 * 134^{0.75} * 6^{0.25}} = 0.242 \text{ lb/MMBtu}$$

- (b) Pursuant to 326 IAC 6-2-3(c), the two (2) boilers, identified as Boiler #5(N) and Boiler #3(S), shall be calculated by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Pt = lbs of PM emitted per MMBtu heat input

C = maximum ground level concentration (default = 50 ug/m³)

a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)

h = stack height in feet

Q = total source maximum operating capacity

N = number of stacks in fuel burning operation

- (1) The one (1) boiler, identified as Boiler #5(N), shall be limited as follows:

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 35}{76.5 * 136^{0.75} * 7^{0.25}} = 0.236 \text{ lb/MMBtu}$$

- (2) The one (1) boiler, identified as Boiler #3(S), shall be limited as follows:

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 35}{76.5 * 136^{0.75} * 8^{0.25}} = 0.204 \text{ lb/MMBtu}$$

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Paper Trimming and Baling

North Plant:

- (c) Four (4) paper trimming and baling processes, process weight rate: 4 tons of paper trim per hour, each, described as follows:
 - (1) Paper Trim #1(N), controlled by Paper Trim Cyclone #1(N), exhausting through stack SBP-5H(N).
 - (2) Paper Trim #2(N), controlled by Paper Trim Cyclone #2(N), exhausting through stack SBP-5I(N).
 - (3) Paper Trim #3(N), controlled by Paper Trim Cyclone #3(N), exhausting through stack SBP-5J(N).
 - (4) Paper Trim #4(N), controlled by Paper Trim Cyclone #4(N), exhausting through stack SBP-5K(N).
- (d) Two (2) Paper Dust Collectors:
 - (1) Dust Collector #1(N) consists of a baghouse for particulate control and is exhausted through SD-6A(N).
 - (2) Dust Collector #2(N) consists of a baghouse for particulate control and is exhausted through SD-6B(N).

South Plant:

- (v) Four (4) paper trimming and baling processes, each constructed in 1976, process weight rate: 4 tons of paper trim per hour, each, described as follows:
 - (1) Paper Trim #1(S), controlled by Paper Trim Cyclone #1(S), exhausting through stack SBP-5E(S).
 - (2) Paper Trim #2(S), controlled by Paper Trim Cyclone #2(S), exhausting through stack SBP-5E(S).
 - (3) Paper Trim #3(S), controlled by Paper Trim Cyclone #3(S), exhausting through stack SBP-5E(S).
 - (4) Paper Trim #4(S), controlled by Paper Trim Cyclone #4(S), exhausting through stack SBP-5E(S).
- (w) One (1) Paper Dust Collector:
 - (1) Dust Collector #1(S) consists of a two (2) cyclones each followed by a baghouse (2 total) for particulate control and are exhausted through SD-6A(S) and new exhaust point SD6C(S).

(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 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the paper trimming and baling processes, identified as Paper Trim #1(N), Paper Trim #2(N), Paper Trim #3(N), Paper Trim #4(N), Paper Trim #1(S), Paper Trim #2(S), Paper Trim #3(S) and Paper Trim #4(S), shall not exceed the pound per hour rates listed in the following table when operating at the specified process weight rates in tons per hour:

Facility	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable PM Emission Rate (pounds per hour)
Paper Trim #1(N)	4	10.4
Paper Trim #2(N)	4	10.4
Paper Trim #3(N)	4	10.4
Paper Trim #4(N)	4	10.4
Paper Trim #1(S)	4	10.4
Paper Trim #2(S)	4	10.4
Paper Trim #3(S)	4	10.4
Paper Trim #4(S)	4	10.4

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Printing presses

North Plant:

- (e) One (1) Mitsubishi web offset lithographic printing press, identified as Press 268, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, with two (2) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (f) One (1) Toshiba web offset lithographic printing press, identified as Press 269, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, exhausting through vent SP-5BB(N) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (g) One (1) Hantscho web offset lithographic printing press, identified as Press 240, constructed in 1988, exhausting through stack SP-5R(N), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (h) One (1) KBA Compacta web offset lithographic printing press, identified as Press 281, constructed in 1991, exhausting through stack SP-5S(N), with two (2) units and two (2) webs, maximum line speed: 1,100 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (i) One (1) Hantscho web offset lithographic printing press, identified as Press 245, constructed in 1989, exhausting through stack SP-5Q(N), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (j) One (1) Timson web offset lithographic printing press, identified as Press 242, constructed in 1995, exhausting through stack SP-5Z(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (k) One (1) Timson web offset lithographic printing press, identified as Press 243, constructed in 1995, exhausting through stack SP-5AA(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (l) One (1) Harris web offset lithographic printing press, identified as Press 285, constructed in 1976, exhausting through stack SP-5K(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (m) One (1) Harris web offset lithographic printing press, identified as Press 286, constructed in 1979, exhausting through stack SP-5L(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (n) One (1) Harris web offset lithographic printing press, identified as Press 287, constructed in 1979, exhausting through stack SP-5M(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (o) One (1) Harris web offset lithographic printing press, identified as Press 288, constructed in 1979, exhausting through stack SP-5N(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (p) One (1) Harris web offset lithographic printing press, identified as Press 289, constructed in 1984, exhausting through stack SP-5O(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (q) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 232, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches including five (5) units and coater.
- (r) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 233, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches including five (5) units and coater.
- (s) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 238, constructed in 1990, exhausting through stack SP-5V(N), maximum line speed: 434 feet per minute, maximum printing width: 40 inches including six (6) units and coater.
- (t) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 239, constructed in 1992, exhausting through stack SP-5W(N), maximum line speed: 473 feet per minute, maximum printing width: 40 inches including two (2) units and coater.

South Plant:

- (x) One (1) Mitsubishi web offset lithographic printing press, identified as Press 262, constructed in 1992, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, exhausting through stacks SP-7T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5N(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (y) One (1) Hantscho web offset lithographic printing press, identified as Press 270, constructed in 1979, exhausting through stack SP-5F(S), with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (z) One (1) Cottrell web offset lithographic printing press, identified as Press 272, constructed in 1973, exhausting through stack SP-5D(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (aa) One (1) Mitsubishi web offset lithographic printing press, identified as Press 273, constructed in 1991, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5L(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,615 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (bb) One (1) Cottrell web offset lithographic printing press, identified as Press 276, constructed in 1976,

- exhausting through stack SP-5E(S), with four (4) units and two (2) webs, maximum line speed: 1,200 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (cc) One (1) Toshiba web offset lithographic printing press, identified as Press 260, constructed in 1986, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5I(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,615 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (dd) One (1) Toshiba web offset lithographic printing press, identified as Press 261, constructed in 1987, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5J(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,500 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ee) One (1) Hantscho web offset lithographic printing press, identified as Press 290, constructed in 1984, exhausting through stack SP-5G(S), with one (1) unit and one (1) web, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ff) One (1) Hantscho web offset lithographic printing press, identified as Press 291, constructed in 1984, exhausting through stack SP-5H(S), with four (4) units and two (2) webs, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (gg) One (1) Hantscho web offset lithographic printing press, identified as Press 293, constructed in 1989, exhausting through stack SP-5K(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (hh) One (1) Hantscho web offset lithographic printing press, identified as Press 294, constructed in 1991, exhausting through stack SP-5M(S), with four (4) units and two (2) webs, maximum line speed: 1,076 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ii) One (1) Hantscho web offset lithographic printing press, identified as Press 295, constructed in 1993, exhausting through stack SP-5P(S), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (jj) One (1) Harris web offset lithographic printing press, identified as Press 296, constructed in 1994, exhausting through stack SP-5Q(S), with two (2) units and two (2) webs, maximum line speed: 860 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (kk) One (1) Heidelberg sheetfed offset lithographic press, identified as Press 258, constructed in 1995, exhausting through stack SP-5R(S), maximum line speed: 505 feet per minute, maximum printing width: 40.5 inches, including six (6) units and coater.

- (ll) One (1) coating operation used for edge staining paper, identified as In-line Stainer 192, constructed in 1993, utilizing HVLP spray coating, utilizing dry filters for overspray control and exhausting through stack BS-4X(N).
- (mm) One (1) nonheatset, sheetfed, offset lithographic printing press, identified as Press 250, constructed in 2006, exhausting through stack SP-5U(s), capacity: 13,000 sheets per hour, 1,120 square inches per sheet.
- (nn) One (1) Goss web offset lithographic printing press, identified as Press 210, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7C(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (oo) One (1) Goss web offset lithographic printing press, identified as Press 211, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7E(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (pp) One (1) Goss web offset lithographic printing press, identified as Press 212, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7G(S) in nonheatset mode, maximum line speed: 2,433 feet per minute maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (qq) One (1) Goss web offset lithographic printing press, identified as Press 213, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7H(S) in nonheatset mode, maximum line speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (rr) One (1) Goss web offset lithographic printing press, identified as Press 214, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7F(S), maximum line speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ss) One (1) Timson web offset lithographic printing press, identified as Press 215, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7D(S) in nonheatset mode, maximum line speed: 1,700 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (tt) One (1) non heat set, sheet-fed, offset lithographic printing press, identified as Press 251, approved for construction in 2007, with a maximum capacity of 18,000 sheets (17.84 million square inches) per hour, exhausting to stack SP-7J(s).

(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 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6] [326 IAC 2-7-10.5(d)(5)(A)]

- (a) The twelve (12) presses, identified as Press 240, Press 281, Press 245, Press 289, Press 238, Press 239, Press 290, Press 291, Press 293, Press 294, Press 295, and Press 296 shall be limited as follows:

The VOC content delivered to the applicator of each press shall be limited such that VOC emitted is less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This renders the Best Available Control Technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

- (b) Pursuant to AA 107-17119-00052, issued on February 4, 2003, the amount of VOC delivered to the applicator of Press 258 shall be limited such that VOC emitted is less than ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The VOC content delivered to the applicator of the two (2) presses, identified as Press 232 and Press 233, shall be limited such that VOC emitted is less than twenty-five (25) tons combined pressroom emissions from Press 232 and Press 233 (combined) per twelve (12) consecutive month period, with compliance determined at the end of each month. This renders the Best Available Control Technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

For these two presses, total VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) \end{aligned}$$

Pursuant to AA 107-10512-00052, issued on March 15, 1999, the usage of isopropyl alcohol shall not exceed 750 pounds per consecutive twelve (12) month period as part of the fountain solution.

- (d) Pursuant to CP 107-4233 issued April 20, 1995, total VOC content delivered to the applicator of the two (2) presses, identified as Press 242 and Press 243, shall be limited such that VOC emitted is less than a combined thirty-nine (39) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The total amount of VOC delivered to each press individually, including clean-up solvents, shall be limited such that VOC emitted is less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This renders 326 IAC 2-2 and 326 IAC 8-1-6 not applicable.

For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content by weight} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content by weight} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content by weight} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content by weight} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content by weight} * 100\% \text{ flash off}) \end{aligned}$$

- (e) Pursuant to 326 IAC 8-1-6 and Significant Permit Modification 107-24641-00052 issued on October 19, 2007, the Best Available Control Technology (BACT) for the twelve (12) presses, identified as Press 268, Press 269, Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215 shall be as follows:
- (1) When operating in heatset mode, Presses 268 and 269 will be controlled by the North Oxidizer, a 7.6 MMBtu per hour thermal oxidizer, and Presses 260, 261, 262, 273, 210, 211, 212, 213, 214 and 215 will be controlled by the regenerative thermal oxidizer system, consisting of one to three operating regenerative thermal oxidizers identified as RTO-1, RTO-2 and RTO-3. The North Oxidizer and the regenerative thermal oxidizer system shall be in operation at all times during which any of the printing presses controlled by the oxidizers/oxidizer system are operating in heatset mode.
- (A) Pursuant to CP 107-2726 issued on February 26, 1993 and CP 107-2917 issued on April 6, 1993, Presses 268 and 269 shall not be operated in heatset mode until such time that the combustion temperature in the thermal oxidizer has attained the minimum temperature determined in testing requirements to destroy at least 90% of captured VOC.
- (B) Presses 260, 261, 262, 273, 210, 211, 212, 213, 214 and 215 shall not be operated in heatset mode until such time that the combustion temperature(s) in the thermal oxidizer system has attained the minimum temperature(s) determined in testing requirements to destroy at least 97% of captured VOC.
- (C) The fountain solution used by Presses 210, 211, 212, 213, 214 and 215 shall not contain greater than 5.0% VOC content by weight, as applied.
- (D) The solvents used for blanket and roller washes by Presses 210, 211, 212, 213, 214 and 215 shall comply with at least one (1) of the following:
- (i) The solvent shall not have a composite VOC vapor pressure greater than 10 mm Hg at 20°C, or
- (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
- (E) The manual cleaning solvents used by Presses 210, 211, 212, 213, 214 and 215 shall comply with at least one (1) of the following:
- (i) The solvent shall not have a composite VOC vapor pressure greater than 25 mm Hg at 20°C, or
- (ii) The solvent shall not contain greater than 2.5 pounds of VOC per

gallon, as applied.

- (2) When operating any of Presses 260, 261, 262, 273, 210, 211, 212, 213, 214, 215, 268, and 269 in nonheatset mode:
- (A) The inks used by that press shall not contain greater than 2.5 pounds of VOC per gallon, as applied;
 - (B) The fountain solution used by that press shall not contain greater than 2.0% VOC content by weight, as applied; and
 - (C) The solvents used for blanket and roller washes by that press shall comply with at least one (1) of the following:
 - (i) The solvent shall not have a composite VOC vapor pressure greater than 10 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
 - (D) The manual cleaning solvents used by that press shall comply with at least one (1) of the following:
 - (i) The solvent shall not have a composite VOC vapor pressure greater than 25 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
- (3) Pursuant to Minor Permit Modification 107-25364-00052 issued on February 12, 2008, the total VOC content delivered to the applicator of Presses 210, 211, 212, 213, 214, 215, and 251 shall be limited such that VOC emitted shall not exceed 39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

For presses 210 through 215, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tpy)} = & \\ & (\text{ink usage in heatset mode} * \text{VOC content} * 80\% \text{ flash off} * 3\% \text{ emitted} \\ & \text{after controls}) + (\text{ink usage in nonheatset mode} * \text{VOC content} * 5\% \text{ flash} \\ & \text{off}) + (\text{fountain solution usage in heatset mode} * \text{VOC content} * 100\% \\ & \text{flash off} * 32.1\% \text{ emitted after controls}) + (\text{fountain solution usage in} \\ & \text{nonheatset mode} * \text{VOC content} * 100\% \text{ flash off}) + (\text{manual cleaner} \\ & \text{usage} * \text{VOC content} * 50\% \text{ flash off}) + (\text{automatic cleaner usage in} \\ & \text{heatset mode} * \text{VOC content} * 61.2\% \text{ emitted after controls}) + (\text{automatic} \\ & \text{cleaner usage in nonheatset mode} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

For press 251, total VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tpy)} = & \\ & (\text{ink usage} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

Compliance with these requirements satisfies the Best Available Control Technology (BACT)

requirement in 326 IAC 8-1-6 for both heatset and nonheatset modes.

D.3.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

The VOC content delivered to the one (1) coating operation, identified as In-line Stainer 192, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month. This renders the best available control technology (BACT) requirement of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

D.3.3 Volatile Organic Compounds (VOCs) [326 IAC 2-2]

- (a) The VOC content delivered to the applicators of Press 287 and Press 288 shall be limited such that VOC emitted is less than forty (40) tons per twelve (12) consecutive month period, total, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.
- (b) The VOC content delivered to the applicator of Press 286 shall be limited such that VOC emitted is less than forty (40) tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.
- (c) The VOC content delivered to the applicator of Press 270 shall be limited such that VOC emitted is less than forty (40) tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.

D.3.4 Clean-up Solvent VOC Emissions Control

The VOC flash off for clean-up solvent is 100%. As derived from U.S. EPA Alternative Control Techniques Document: Offset Lithographic Printing (EPA 453/R-94 054, June 1994), the accepted shop towel retention factor for clean-up solvent is 50%. A 50% reduction in flash off shall be used in VOC emissions formulae in D.3.1 as an emission control technique and shall meet the following conditions:

- (a) The clean-up solvent shall have a VOC content of thirty percent (30%) or less, by weight, or a composite VOC vapor pressure less than or equal to ten (10) millimeters of mercury (Hg) at twenty degrees Celsius (20°C); and
- (b) The clean-up solvents shall be kept in tightly covered tanks or containers during transport and storage; and
- (c) The cleaning cloths used with the clean-up solvents shall be placed in tightly closed containers when not in use and while awaiting off-site transport. The cleaning cloths shall be properly cleaned and disposed.

D.3.5 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) coating operation, identified as In-Line Stainer 192, shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.3.6 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Testing of the North Oxidizer and regenerative thermal oxidizer RTO-1 to verify their

destruction efficiencies was performed on August 18, 2005.

- (b) Within sixty (60) days after achieving the maximum rated capacity at which Presses 212 and 213 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency as per Condition D.3.1 for regenerative thermal oxidizer RTO-2 utilizing methods as approved by the Commissioner.
- (c) Within sixty (60) days after achieving the maximum rated capacity at which Presses 214 and 215 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the VOC destruction efficiency as per Condition D.3.1 for regenerative thermal oxidizer RTO-3 utilizing methods as approved by the Commissioner.
- (d) These tests shall be repeated at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.1 and D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements

D.3.9 Thermal Oxidizers [326 IAC 8-1-6] [40 CFR 64.1]

- (a) The North Oxidizer shall operate at all times that either of the two (2) presses, identified as Press 268 and Press 269, are operating in heatset mode.
- (b) The regenerative thermal oxidizer system, consisting of one (1) to three (3) oxidizers identified as RTO-1, RTO-2 and/or RTO-3, shall operate at all times that any of ten (10) presses, identified as Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215 are operating in heatset mode.
- (c) When operating the North Oxidizer, the thermal oxidizer shall maintain a minimum operating temperature of:
 - (1) 1350°F, or
 - (2) the temperature and fan amperage or duct velocity determined at the stack tests that achieves a minimum 90% destruction efficiency of the VOC.
- (d) When operating thermal oxidizers RTO-1, RTO-2 or RTO-3, the thermal oxidizer shall maintain a minimum operating temperature of:
 - (1) 1350°F, or
 - (2) the temperature and fan amperage or duct velocity determined at the stack tests that achieves a minimum 97% destruction efficiency of the VOC.

D.3.10 Thermal Oxidizer Temperature [326 IAC 8-1-6] [40 CFR 64.1]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on each thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved

stack test results are available, the Permittee shall operate each thermal oxidizer at or above the 3-hour average temperature of 1350°F.

- (b) The Permittee shall determine, for each thermal oxidizer, the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the control efficiency requirement in Condition D.3.1(e)(1), as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate each thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

D.3.11 Parametric Monitoring [326 IAC 8-1-6] [40 CFR 64.1]

- (a) The Permittee shall determine, for each thermal oxidizer, the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with the control efficiency requirement in Condition D.3.1(e)(1), as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.12 Particulate Matter Monitoring

- (a) Daily inspections from the one (1) coating operation, identified as In-line Stainer 192 shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. During periods of inclement weather, these inspections shall be performed as weather permits. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1, D.3.2, D.3.3 and D.3.4, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.1, D.3.2, D.3.3 and D.3.4:
 - (1) The amount and VOC content of each ink, fountain solution, coating material and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS) or other documentation necessary to verify the type and amount used. Ink usage records shall indicate whether the ink was used in heatset or nonheatset mode. Solvent usage records shall differentiate between those used in coatings and ink and those used as cleanup solvents;

- (2) The total VOC usage for each month at each facility; and
 - (3) The weight of VOCs emitted from each facility for each compliance period.
- (b) To document compliance with Condition D.3.12, the Permittee shall maintain a log of daily inspections, weekly observations, and monthly inspections.
 - (c) To document the compliance with Condition D.3.10 and D.3.11, the Permittee shall maintain the continuous temperature records for the thermal oxidizers and the temperature used to demonstrate compliance during the most recent compliance stack test and weekly records of the duct pressure or fan amperage.
 - (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2 and D.3.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052

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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

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

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 240
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 281
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 245
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 289
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 238
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 239
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 290
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 291
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 293
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 294
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052
Facility: One (1) press, identified as Press 295
Parameter: VOC Emissions
Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 296
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: Two (2) presses, identified as Press 232 and Press 233
 Parameter: Total VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For these two presses, total VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: Two (2) presses, identified as Press 242 and Press 243
 Parameter: Total VOC Emissions
 Limit: Less than 39 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as 242
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

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

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as 243
 Parameter: VOC Emissions
 Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

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

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: Two (2) presses, identified as Press 287, and Press 288
 Parameter: VOC Emissions
 Limit: Less than 40 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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.

**OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 286
 Parameter: VOC Emissions
 Limit: Less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
 Part 70 Permit No.: T 107-23664-00052
 Facility: One (1) press, identified as Press 270
 Parameter: VOC Emissions
 Limit: Less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

$$\begin{aligned} \text{VOC emissions (tons)} = & \\ & (\text{ink usage in heatset mode (tons)} * \text{VOC content} * 80\% \text{ flash off}) + \\ & (\text{ink usage in nonheatset mode (tons)} * \text{VOC content} * 5\% \text{ flash off}) + \\ & (\text{fountain solution usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) + \\ & (\text{manual cleaner usage (tons)} * \text{VOC content} * 50\% \text{ flash off}) + \\ & (\text{automatic cleaner usage (tons)} * \text{VOC content} * 100\% \text{ flash off}) \end{aligned}$$

QUARTER: _____ YEAR: _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052
Facility: In-line Stainer 192
Parameter: VOC Usage
Limit: Less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

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

- 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**

Part 70 Quarterly Report

Source Name: R.R. Donnelley & Sons Company
 Source Address: 1009 Sloan Street, Crawfordsville, IN 47933-2743
 Mailing Address: 1009 Sloan Street, Crawfordsville, IN 47933-2743
 Part 70 Permit No.: T107-5963-00052
 Facility: Press 210, Press 211, Press 212, Press 213, Press 214, Press 215, and Press 251
 Parameter: VOC Emissions
 Limit: Total VOC emissions shall not exceed a combined 39 tons per year, based on the following equation:

For presses 210 through 215, VOC emissions =
 (ink usage in heatset mode * VOC content * 80% flash off * 3% emitted after controls) +
 (ink usage in nonheatset mode * VOC content * 5% flash off) +
 (fountain solution usage in heatset mode * VOC content * 100% flash off *
 32.1% emitted after controls) +
 (fountain solution usage in nonheatset mode * VOC content * 100% flash off) +
 (manual cleaner usage * VOC content * 50% flash off) +
 (automatic cleaner usage in heatset mode * VOC content * 61.2% emitted after controls) +
 (automatic cleaner usage in nonheatset mode * VOC content * 100% flash off)

For press 251, VOC emissions =
 (ink usage * VOC content * 5% flash off) +
 (fountain solution usage * VOC content * 100% flash off) +
 (manual cleaner usage * VOC content * 50% flash off) +
 (automatic cleaner usage * VOC content * 100% flash off)

YEAR: _____

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

- 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**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052

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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</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**

Addendum to the
Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	R. R. Donnelley & Sons Company
Source Location:	1009 Sloan Street, Crawfordsville, IN 47933
County:	Montgomery
SIC Code:	2732
Permit Renewal No.:	T 107-23664-00052
Permit Reviewer:	Jeff Scull

On June 24, 2008, the Office of Air Quality (OAQ) had a notice published in the Journal Review, stating that R. R. Donnelley & Sons Company had applied for a Part 70 Operating Permit renewal for a stationary book printing and binding source. The notice also stated that OAQ proposed to issue a permit renewal for this operation and provided information on how the public could review the proposed permit renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit renewal should be issued as proposed.

Changes to the permit are noted as follows: struck language has been deleted; bold language has been added. The Table of Contents has been modified to reflect these changes.

Comments on the proposed Part 70 permit renewal were received on July 24, 2008 and follow up comments on August 12, 2008 from Mr. Richard Winter of R. R. Donnelley & Sons Company.

Comment #1

R. R. Donnelley & Sons Company proposes to remove the forty (40) tons per twelve (12) consecutive month period VOC limit for the four (4) presses, identified as Press 286, Press 287, Press 288 and Press 270 in Condition D.3.3 because they were not in any previous permits, modifications, or amendments. R. R. Donnelley & Sons Company contends as stated in the current draft, these proposed limits eliminate all accepted retention factors for cold-set and heat-set web printing and conflict with other permit requirements.

Response to Comment #1

IDEM agrees the presses in question were constructed prior to January 1, 1980, and are not subject to the requirements of 326 IAC 8-1-6. IDEM agrees that the 326 IAC 2-2 limits in Section D.3.3 in the permit draft are inconsistent with other VOC limits in the permit.

The four (4) presses (Press 270, Press 286, Press 287, and Press 288) were constructed after the Prevention of Significant Deterioration (PSD) applicability date of August 7, 1977. This source had a VOC PTE of approximately 427 tons per year with no minor limits for 326 IAC 2-2 prior to adding the four presses. This established the source as a major source for VOC under PSD. The VOC PTE of each of these projects is greater than 40 tons per year. Therefore, a limit is necessary to avoid the requirements of 326 IAC 2-2 (PSD). The four (4) presses were constructed under three (3) different construction permits: PC (54) 1257 issued on July 11, 1978 (Press 287 and Press 288), PC (34) 1285 issued on September 6, 1978 (Press 286) and PC (54) 1398 issued on June 18, 1979 (Press 270). Each construction permit should have included minor limits of less than 40 tons per year of VOC to avoid the requirements of 326 IAC 2-2 (PSD).

The formula used to calculate VOC emissions for the four presses was established in the original operating permit for the source, T 107-5963-00052. In that formula VOC emitted is based on the following equation:

VOC emissions (tpy) = (ink usage X volatile content X 80% flash off) + (fountain solution usage X volatile content X 100% flash off) + (cleaner usage X volatile content X 50% flash off)

The formula in this permit is based on the formula from the original permit but accounts for heatset and nonheatset modes of the presses, and accounts for manual and automatic cleaner usage. VOC emitted will be based on the following equation:

VOC emissions (tons) =
(ink usage in heatset mode (tons) * VOC content * 80% flash off) +
(ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
(fountain solution usage (tons) * VOC content * 100% flash off) +
(manual cleaner usage (tons) * VOC content * 50% flash off) +
(automatic cleaner usage (tons) * VOC content * 100% flash off)

The permit condition, emissions calculations, and Part 70 Quarterly Reporting forms have been changed as follows:

D.3.3 Volatile Organic Compounds (VOCs) [326 IAC 2-2]

- (a) The VOC content delivered to the applicators of Press 287 and Press 288 ~~the four (4) presses, identified as Press 286, Press 287, Press 288 and Press 270,~~ shall be limited such that VOC emitted ~~to is~~ is less than forty (40) tons per twelve (12) consecutive month period, total, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.
- (b) The VOC content delivered to the applicator of Press 286 shall be limited such that VOC emitted is less than forty (40) tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.
- (c) The VOC content delivered to the applicator of Press 270 shall be limited such that VOC emitted is less than forty (40) tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month. This renders the requirements of 326 IAC 2-2 not applicable.

COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052
Facility: ~~Four (4)~~ **Two (2)** presses, identified as ~~Press 286, Press 287, and Press 288 and Press 270~~
Parameter: VOC Emissions
Limit: Less than 40 tons per twelve (12) consecutive month period, **total**, with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

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

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052
Facility: One (1) press, identified as Press 286
Parameter: VOC Emissions
Limit: Less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ **YEAR:** _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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**

Part 70 Quarterly Report

Source Name: R. R. Donnelley & Sons Company
Source Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Mailing Address: 1009 Sloan Street, Crawfordsville, Indiana 47933
Part 70 Permit No.: T 107-23664-00052
Facility: One (1) press, identified as Press 270
Parameter: VOC Emissions
Limit: Less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. For each press, VOC emitted shall be based on the following equation:

VOC emissions (tons) =
 (ink usage in heatset mode (tons) * VOC content * 80% flash off) +
 (ink usage in nonheatset mode (tons) * VOC content * 5% flash off) +
 (fountain solution usage (tons) * VOC content * 100% flash off) +
 (manual cleaner usage (tons) * VOC content * 50% flash off) +
 (automatic cleaner usage (tons) * VOC content * 100% flash off)

QUARTER: _____ **YEAR:** _____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 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.

Comment #2

The current permit only requires weekly observations of the overspray while in operation. These weekly observations are required by current condition D.3.13 to be documented. Additional other inspections of this process are required at daily and monthly intervals; however, these inspections are not required to be documented by the permit.

Response to Comment #2

IDEM agrees the wording of permit condition D.3.13 (b) makes it appear that the source must document overspray observations on a daily, weekly and monthly basis. The requirements in permit condition D.3.13 (b) require the following inspections and observations from permit condition D.3.12 be documented:

- (a) Daily inspections from the one (1) coating operation, identified as In-line Stainer 192 shall be performed to verify the placement, integrity and particle loading of the filters.
- (b) Weekly observations shall be made of the overspray while in operation, to monitor the performance of the dry filters.
- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

The permit has been changed as follows:

D.3.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1, D.3.2, D.3.3 and D.3.4, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.1, D.3.2, D.3.3 and D.3.4:
 - (1) The amount and VOC content of each ink, fountain solution, coating material and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS) or other documentation necessary to verify the type and amount used. Ink usage records shall indicate whether the ink was used in heatset or nonheatset mode. Solvent usage records shall differentiate between those used in coatings and ink and those used as cleanup solvents;
 - (2) The total VOC usage for each month at each facility; and
 - (3) The weight of VOCs emitted from each facility for each compliance period.
- (b) To document compliance with Condition D.3.12, the Permittee shall maintain a log of daily **inspections**, weekly **observations**, and monthly **inspections**.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	R. R. Donnelley & Sons Company
Source Location:	1009 Sloan Street, Crawfordsville, IN 47933
County:	Montgomery
SIC Code:	2732
Permit Renewal No.:	T 107-23664-00052
Permit Reviewer:	Jeff Scull

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from R. R. Donnelley & Sons Company relating to the operation of a book printing and binding source.

History

On September 19, 2006, R. R. Donnelley & Sons Company submitted an application to the OAQ requesting to renew its operating permit. R. R. Donnelley & Sons Company was issued a Part 70 Operating Permit Renewal on June 21, 2002.

Source Definition

This Source Definition from the initial Part 70 Operating Permit was incorporated into this permit as follows:

This book printing and binding source consists of two (2) plants:

- (a) North Plant is located at 1009 Sloan St., Crawfordsville, IN; and
- (b) South Plant is located at State Road 32 West, Crawfordsville, IN.

These two (2) plants are located adjacent to each other, separated by a public road and a railroad right of way, have the same SIC codes and are owned by one (1) company. Therefore, they will be considered one (1) major source, as defined by 326 IAC 2-7-1(22).

On October 13, 1997, Review Request 107-8861-00052 was issued designating the North Plant (107-00010) and the South Plant (107-00011) as one source. The initial Part 70 Operating Permit T107-5963-00052 issued on June 21, 2002 is the first permit with both plants listed in one permit.

Permitted Emission Units and Pollution Control Equipment

North Plant:

- (a) Four (4) natural gas-fired boilers, each capable of combusting propane as backup, heat input capacity: 20.9 million British thermal units per hour, each, described as follows:
 - (1) Boiler #1(N), constructed in 1956, exhausting through stack SB-4A(N).
 - (2) Boiler #2(N), constructed in 1956, exhausting through stack SB-4B(N).
 - (3) Boiler #3(N), constructed in 1962, exhausting through stack SB-4C(N).
 - (4) Boiler #4(N), constructed in 1972, exhausting through stack SB-4D(N).

- (b) One (1) natural gas-fired boiler, identified as Boiler #5(N), constructed in 1975, combusting propane as backup, exhausting through stack SB-4E(N), heat input capacity: 2.56 million British thermal units per hour.
- (c) Four (4) paper trimming and baling processes, process weight rate: 4 tons of paper trim per hour, each, described as follows:
 - (1) Paper Trim #1(N), controlled by Paper Trim Cyclone #1(N), exhausting through stack SBP-5H(N).
 - (2) Paper Trim #2(N), controlled by Paper Trim Cyclone #2(N), exhausting through stack SBP-5I(N).
 - (3) Paper Trim #3(N), controlled by Paper Trim Cyclone #3(N), exhausting through stack SBP-5J(N).
 - (4) Paper Trim #4(N), controlled by Paper Trim Cyclone #4(N), exhausting through stack SBP-5K(N).
- (d) Two (2) Paper Dust Collectors:
 - (1) Dust Collector #1(N) consists of a baghouse for particulate control and is exhausted through SD-6A(N).
 - (2) Dust Collector #2(N) consists of a baghouse for particulate control and is exhausted through SD-6B(N).
- (e) One (1) Mitsubishi web offset lithographic printing press, identified as Press 268, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, exhausting to vent SP-5AA(N) in nonheatset mode, with two (2) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (f) One (1) Toshiba web offset lithographic printing press, identified as Press 269, constructed in 1993, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, exhausting through stack SP-5Y(N) when operating in heatset mode, exhausting through vent SP-5BB(N) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,600 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (g) One (1) Hantscho web offset lithographic printing press, identified as Press 240, constructed in 1988, exhausting through stack SP-5R(N), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (h) One (1) KBA Compacta web offset lithographic printing press, identified as Press 281, constructed in 1991, exhausting through stack SP-5S(N), with two (2) units and two (2) webs, maximum line speed: 1,100 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (i) One (1) Hantscho web offset lithographic printing press, identified as Press 245, constructed in 1989, exhausting through stack SP-5Q(N), with four (4) units and two (2)

webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (j) One (1) Timson web offset lithographic printing press, identified as Press 242, constructed in 1995, exhausting through stack SP-5Z(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (k) One (1) Timson web offset lithographic printing press, identified as Press 243, constructed in 1995, exhausting through stack SP-5AA(N), with one (1) unit and one (1) web, maximum line speed: 1,200 feet per minute, maximum printing width: 47 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (l) One (1) Harris web offset lithographic printing press, identified as Press 285, constructed in 1976, exhausting through stack SP-5K(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (m) One (1) Harris web offset lithographic printing press, identified as Press 286, constructed in 1979, exhausting through stack SP-5L(N), with two (2) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (n) One (1) Harris web offset lithographic printing press, identified as Press 287, constructed in 1979, exhausting through stack SP-5M(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (o) One (1) Harris web offset lithographic printing press, identified as Press 288, constructed in 1979, exhausting through stack SP-5N(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (p) One (1) Harris web offset lithographic printing press, identified as Press 289, constructed in 1984, exhausting through stack SP-5O(N), with four (4) units and two (2) webs, maximum line speed: 825 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (q) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 232, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches, including five (5) units and coater.
- (r) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 233, constructed in 1991, exhausting through stack SP-5U(N), maximum line speed: 317 feet per minute, maximum printing width: 25.5 inches, including five (5) units and coater.
- (s) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 238, constructed in 1990, exhausting through stack SP-5V(N), maximum line speed: 434 feet per minute, maximum printing width: 40 inches, including six (6) units and coater.

- (t) One (1) Heidelberg UV sheetfed offset lithographic press, identified as Press 239, constructed in 1992, exhausting through stack SP-5W(N), maximum line speed: 473 feet per minute, maximum printing width: 40 inches, including two (2) units and coater.

South Plant:

- (u) Three (3) natural gas-fired boilers, combusting propane as backup, heat input capacity: 25.1 million British thermal units per hour, each, described as follows:
 - (1) Boiler #1(S), constructed in 1964, exhausting through stack SB-4A(S).
 - (2) Boiler #2(S), constructed in 1964, exhausting through stack SB-4B(S).
 - (3) Boiler #3(S), constructed in 1975, exhausting through stack SB-4C(S).
- (v) Four (4) paper trimming and baling processes, each constructed in 1976, process weight rate: 4 of paper trim tons per hour, each, described as follows:
 - (1) Paper Trim #1(S), controlled by Paper Trim Cyclone #1(S), exhausting through stack SBP-5E(S).
 - (2) Paper Trim #2(S), controlled by Paper Trim Cyclone #2(S), exhausting through stack SBP-5E(S).
 - (3) Paper Trim #3(S), controlled by Paper Trim Cyclone #3(S), exhausting through stack SBP-5E(S).
 - (4) Paper Trim #4(S), controlled by Paper Trim Cyclone #4(S), exhausting through stack SBP-5E(S).
- (w) One (1) Paper Dust Collector:
 - (1) Dust Collector #1(S) consists of two (2) cyclones each followed by a baghouse (2 total) for particulate control and are exhausted through SD-6A(S) and new exhaust point SD6C(S).
- (x) One (1) Mitsubishi web offset lithographic printing press, identified as Press 262, constructed in 1992, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-7T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or Vent SP-5N(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (y) One (1) Hantscho web offset lithographic printing press, identified as Press 270, constructed in 1979, exhausting through stack SP-5F(S), with four (4) units and two (2) webs, maximum line speed: 807 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (z) One (1) Cottrell web offset lithographic printing press, identified as Press 272, constructed in 1973, exhausting through stack SP-5D(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (aa) One (1) Mitsubishi web offset lithographic printing press, identified as Press 273, constructed in 1991, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5L(S) in nonheatset mode, with four (4) units and two (2) webs, maximum line speed: 1,615 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (bb) One (1) Cottrell web offset lithographic printing press, identified as Press 276, constructed in 1976, exhausting through stack SP-5E(S), with four (4) units and two (2) webs, maximum line speed: 1,200 feet per minute, maximum printing width: 64 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (cc) One (1) Toshiba web offset lithographic printing press, identified as Press 260, constructed in 1986, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5I(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,615 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (dd) One (1) Toshiba web offset lithographic printing press, identified as Press 261, constructed in 1987, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through Stack SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-5J(S) in nonheatset mode, with four (4) units and one (1) web, maximum line speed: 1,500 feet per minute, maximum printing width: 36 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ee) One (1) Hantscho web offset lithographic printing press, identified as Press 290, constructed in 1984, exhausting through stack SP-5G(S), with one (1) unit and one (1) web, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ff) One (1) Hantscho web offset lithographic printing press, identified as Press 291, constructed in 1984, exhausting through stack SP-5H(S), with four (4) units and two (2) webs, maximum line speed: 800 feet per minute, maximum printing width: 26 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (gg) One (1) Hantscho web offset lithographic printing press, identified as Press 293, constructed in 1989, exhausting through stack SP-5K(S), with four (4) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (hh) One (1) Hantscho web offset lithographic printing press, identified as Press 294, constructed in 1991, exhausting through stack SP-5M(S), with four (4) units and two (2) webs, maximum line speed: 1,076 feet per minute, maximum printing width: 33 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (ii) One (1) Hantscho web offset lithographic printing press, identified as Press 295, constructed in 1993, exhausting through stack SP-5P(S), with two (2) units and two (2) webs, maximum line speed: 1,000 feet per minute, maximum printing width: 33 inches,

with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (jj) One (1) Harris web offset lithographic printing press, identified as Press 296, constructed in 1994, exhausting through stack SP-5Q(S), with two (2) units and two (2) webs, maximum line speed: 860 feet per minute, maximum printing width: 31 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (kk) One (1) Heidelberg sheetfed offset lithographic press, identified as Press 258, constructed in 1995, exhausting through stack SP-5R(S), maximum line speed: 505 feet per minute, maximum printing width: 40.5 inches, including six (6) units and coater.
- (ll) One (1) coating operation used for edge staining paper, identified as In-line Stainer 192, constructed in 1993, utilizing HVLP spray coating, utilizing dry filters for overspray control and exhausting through stack BS-4X(N).
- (mm) One (1) nonheatset, sheetfed, offset lithographic printing press, identified as Press 250, constructed in 2006, exhausting through stack SP-5U(S), capacity: 13,000 sheets per hour; 1,120 square inches per sheet.
- (nn) One (1) Goss web offset lithographic printing press, identified as Press 210, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7C(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (oo) One (1) Goss web offset lithographic printing press, identified as Press 211, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting to stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7E(S) in nonheatset mode, maximum line speed: 2,433 feet per minute, maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (pp) One (1) Goss web offset lithographic printing press, identified as Press 212, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7G(S) in nonheatset mode, maximum line speed: 2,433 feet per minute maximum printing width: 50 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (qq) One (1) Goss web offset lithographic printing press, identified as Press 213, approved for construction in 2007 with a projected start up in 2010, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7H(S) in nonheatset mode, maximum line speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (rr) One (1) Goss web offset lithographic printing press, identified as Press 214, approved for construction in 2007 with a projected start up in 2009, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7F(S), maximum line

speed: 2,646 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.

- (ss) One (1) Timson web offset lithographic printing press, identified as Press 215, approved for construction in 2007 with a projected start up in 2008, VOC emissions controlled by a natural gas-fired regenerative thermal oxidizer system, exhausting through stacks SP-5T(S), SP-7A(S) and/or SP-7B(S) in heatset mode or vent SP-7D(S) in nonheatset mode, maximum line speed: 1,700 feet per minute, maximum printing width: 66 inches, with associated in-line equipment. The press may operate in either a heatset or nonheatset mode.
- (tt) One (1) nonheatset, sheet-fed, offset lithographic printing press, identified as Press 251, constructed in 2007, with a maximum capacity of 18,000 sheets (17.84 million square inches) per hour, exhausting to stack SP-7J(s).

Insignificant Activities

North Plant:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, described as follows:
 - (1) One (1) natural gas-fired regenerative thermal oxidizer, identified as North Oxidizer, constructed in 1993, heat input capacity 7.60 million British thermal units per hour, capable of controlling Press 268 and Press 269, exhausting through stack SP-5Y(N).
 - (2) Press 240 Dryer, heat input capacity: 4.40 million British thermal units per hour.
 - (3) Press 242 Dryer, heat input capacity: 3.34 million British thermal units per hour.
 - (4) Press 243 Dryer, heat input capacity: 3.34 million British thermal units per hour.
 - (5) Press 245 Dryer, heat input capacity: 4.40 million British thermal units per hour.
 - (6) Press 268 Dryer, heat input capacity: 8.73 million British thermal units per hour.
 - (7) Press 269 Dryer, heat input capacity: 4.49 million British thermal units per hour.
 - (8) Press 281 Dryer, heat input capacity: 4.40 million British thermal units per hour.
 - (9) Press 285 Dryer, heat input capacity: 8.00 million British thermal units per hour.
 - (10) Press 286 Dryer, heat input capacity: 8.00 million British thermal units per hour.
 - (11) Press 287 Dryer, heat input capacity: 8.00 million British thermal units per hour.
 - (12) Press 288 Dryer, heat input capacity: 8.00 million British thermal units per hour.
 - (13) Press 289 Dryer, heat input capacity: 8.00 million British thermal units per hour.
- (b) Combustion source flame safety purging on startup.
- (c) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

- (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (f) Closed loop heating and cooling systems.
- (g) Exposure chambers ("towers", "columns"), for curing of ultraviolet coatings where heat is the intended discharge.
- (h) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (i) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (j) Noncontact cooling tower systems with forced and induced draft cooling tower system, not regulated under a NESHAP.
- (k) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (l) Asbestos abatement projects regulated by 326 IAC 14-10.
- (m) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (n) Other activities of categories not previously identified:
 - (1) Glue and hot melt applications: less than 15 lb/day VOC emissions
 - (2) Vacuum pumps: used to grip thin paper sheets for movement

South Plant:

- (o) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, described as follows:
 - (1) One (1) natural gas-fired regenerative thermal oxidizer system comprised of existing regenerative thermal oxidizer, identified as RTO-1, constructed in 2007, and the new regenerative thermal oxidizers designated RTO-2 and RTO-3, approved for construction in 2007 and scheduled for start up in 2008 and 2010 respectively, operating in a parallel mode, with the emissions from the heatset presses shared across the three regenerative thermal oxidizers.
 - (A) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO-1, constructed in 2007, heat input capacity: 1.7 million British thermal units per hour, capable of controlling Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215, exhausting through stack SP-5T(S).

- (B) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO-2, approved for construction in 2007 with a projected start up in 2008, heat input capacity: 3.0 million British thermal units per hour, capable of controlling Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215, exhausting through Stack SP-7A(S).
- (C) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO-3, approved for construction in 2007 with a projected start up in 2010, heat input capacity: 3.0 million British thermal units per hour, capable of controlling Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215, exhausting through Stack SP-7B(S).
- (2) Press 260 Dryer, heat input capacity: 5.13 million British thermal units per hour.
- (3) Press 261 Dryer, heat input capacity: 5.13 million British thermal units per hour.
- (4) Press 262 Dryer, heat input capacity: 8.73 million British thermal units per hour.
- (5) Press 270 Dryer, heat input capacity: 3.66 million British thermal units per hour.
- (6) Press 272 Dryer, heat input capacity: 9.97 million British thermal units per hour.
- (7) Press 273 Dryer, heat input capacity: 8.73 million British thermal units per hour.
- (8) Press 276 Dryer, heat input capacity: 9.97 million British thermal units per hour.
- (9) Press 290 Dryer, heat input capacity: 4.00 million British thermal units per hour.
- (10) Press 291 Dryer, heat input capacity: 4.20 million British thermal units per hour.
- (11) Press 293 Dryer, heat input capacity: 5.50 million British thermal units per hour.
- (12) Press 294 Dryer, heat input capacity: 5.50 million British thermal units per hour.
- (13) Press 295 Dryer, heat input capacity: 5.50 million British thermal units per hour.
- (14) Press 296 Dryer, heat input capacity: 4.40 million British thermal units per hour.
- (15) Press 210 Dryer, heat input capacity: 3.00 million British thermal units per hour.
- (16) Press 215 Dryer, heat input capacity: 4.01 million British thermal units per hour.
- (17) Press 211 Dryer, heat input capacity: 3.00 million British thermal units per hour.
- (18) Press 214 Dryer, heat input capacity: 4.27 million British thermal units per hour.
- (19) Press 212 Dryer, heat input capacity: 3.00 million British thermal units per hour.
- (20) Press 213 Dryer, heat input capacity: 4.27 million British thermal units per hour.
- (p) Combustion source flame safety purging on startup.
- (q) The following VOC and HAP storage containers:

- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (r) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (s) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (t) Closed loop heating and cooling systems.
- (u) Infrared cure equipment.
- (v) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (w) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (x) Noncontact cooling tower systems with forced and induced draft cooling tower system, not regulated under a NESHAP.
- (y) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (z) Asbestos abatement projects regulated by 326 IAC 14-10.
- (aa) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (bb) Other activities of categories not previously identified.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T 107-5963-00052 on June 21, 2002, the source has constructed or has been operating under the following approvals as well:

- (a) Administrative Amendment No. 107-17119-00052, issued on February 4, 2003.
- (b) Significant Permit Modification No. 107-16731-00052, issued on March 28, 2003.
- (c) Administrative Amendment No. 107-17255-00052, issued on April 8, 2003.
- (d) Significant Permit Modification No. 107-17225-00052, issued on May 13, 2003.
- (e) Administrative Amendment No. 107-17454-00052, issued on July 25, 2003.
- (f) Administrative Amendment No. 107-18767-00052, issued on March 15, 2004.
- (g) Minor Permit Modification No. 107-21171-00052, issued on August 5, 2005.
- (h) Minor Source Modification No. 107-22646-00052, issued on April 3, 2006.
- (i) Minor Permit Modification No. 107-22728-00052, issued on June 1, 2006.

- (j) Administrative Amendment No. 107-22827-00052, issued on June 21, 2006.
- (k) Significant Permit Modification No. 107-23347-00052, issued on August 15, 2007.
- (l) Significant Source Modification No. 107-24571-00052, issued on October 1, 2007.
- (m) Significant Permit Modification No. 107-24641-00052, issued on October 19, 2007.
- (n) Minor Source Modification No. 107-25249-00052, issued on November 30, 2007.
- (o) Minor Permit Modification No. 107-25364-00052, issued on February 12, 2008.

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

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

- (a) Condition D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

The previous limit calculated the PM limit as one (1) limit for each boiler, pursuant to 326 IAC 6-2-3(b). Since the two (2) boilers, identified as Boiler #5(N) and Boiler #3(S), were constructed after June 8, 1972, and before September 21, 1983, these limits were recalculated pursuant to 326 IAC 6-2-3(c).

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, they were not incorporated into this Part 70 Operating Permit Renewal:

- (a) The compliance monitoring, record keeping and reporting requirements conditions associated with the paper trimming and baling processes (Conditions D.2.3, D.2.4, and D.2.5).

Reason not incorporated: Based on an emission factor of two (2) pounds of particulate per one (1) ton of material transferred, the control equipment is not needed in order to comply with 326 IAC 6-3-2. See state rule applicability section of this document.

- (b) Conditions limiting the paper dust transfer and collecting processes.

Reason not incorporated: Based on an emission factor of three (3) pounds of PM per one (1) ton of product, the uncontrolled potential to emit of these processes is less than five hundred fifty-one thousandths (0.551) pound per hour, each. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the paper dust transfer and collecting processes are exempt from the requirements of 326 IAC 6-3-2. See state rule applicability section of this document.

- (c) Condition D.3.5 Particulate Matter (PM) [326 IAC 6-3]

The PM from Stainer 192 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Reason not incorporated: This condition set a pound per hour particulate limit for the

paint booths. Revisions to 326 IAC 6-3 were effective June 12, 2002 and approved into the Indiana State Implementation Plan (SIP) on September 23, 2005. Those revisions created separate requirements for surface coating operations. The revised rule requires surface coating operations to use a control device rather than meet a pound per hour emission limit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 17).

County Attainment Status

The source is located in Montgomery County.

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Attainment
SO ₂	Attainment
NO _x	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Montgomery County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Montgomery County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) Montgomery County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	294
PM ₁₀	300
SO ₂	0.932
VOC	3878
CO	130
NO _x	231

HAPs	tons/year
Cumene	0.416
Ethylene Glycol	6.68
Formaldehyde	0.116
Glycol Ethers	12.8
Hexane	2.79
Hydroquinone	8.61
Xylene	0.610
Toluene	0.011
Total	32.0

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, VOC, CO and NO_x is greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than one hundred (<100) tons per year. For the purposes of Title V permitting, PM₁₀, not PM is the regulated pollutant.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data and the 2005 TRI emission data for HAPs.

Pollutant	Actual Emissions (tons/year)
PM ₁₀	17
PM _{2.5}	7
SO ₂	0
VOC	204
CO	10
NO ₂	11
HAP (Ethylene Glycol)	1.77
HAP (Glycol Ethers)	3.51

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

- (a) This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM and PM ₁₀							
In-line stainer 192	Dry Filters	Y	5.01	.501	100	N	N
Paper Trim and Paper Dust Transfer	Baghouse and/or Cyclone	Y	35.0 or less each unit	3.50 or less each unit	100	N	N
VOC							
Press 269	RTO	Y	209	21	100	Y	N
Press 262	RTO	Y	70	2	100	Y	N
Press 273	RTO	Y	270	8	100	Y	N
Press 260	RTO	Y	76	2	100	Y	N
Press 261	RTO	Y	71	2	100	Y	N
Press 210	RTO	Y	159	5	100	Y	N
Press 211	RTO	Y	147	4	100	Y	N
Press 212	RTO	Y	159	5	100	Y	N
Press 213	RTO	Y	228	7	100	Y	N
Press 214	RTO	Y	159	5	100	Y	N
Press 215	RTO	Y	228	7	100	Y	N

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
HAPs							
Press 268	RTO	N	1.90 total	1.90 total	25 total, 10 individual	N	N
Press 269	RTO	N	1.48 total	1.48 total	25 total, 10 individual	N	N
Press 262	RTO	N	0.49 total	0.49 total	25 total, 10 individual	N	N
Press 273	RTO	N	1.91 total	1.91 total	25 total, 10 individual	N	N
Press 260	RTO	N	0.54 total	0.54 total	25 total, 10 individual	N	N
Press 261	RTO	N	0.50 total	0.50 total	25 total, 10 individual	N	N
Press 210	RTO	N	1.13 total	1.13 total	25 total, 10 individual	N	N
Press 211	RTO	N	1.04 total	1.04 total	25 total, 10 individual	N	N
Press 212	RTO	N	1.13 total	1.13 total	25 total, 10 individual	N	N
Press 213	RTO	N	1.62 total	1.62 total	25 total, 10 individual	N	N
Press 214	RTO	N	1.13 total	1.13 total	25 total, 10 individual	N	N
Press 215	RTO	N	1.62 total	1.62 total	25 total, 10 individual	N	N

The remaining facilities at this source do not utilize a control device to comply with applicable emission limitations or standards. Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to the twelve (12) presses, identified as Press 268, Press 269, Press 262, Press 273, Press 260, Press 261, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215 for VOC. A CAM plan has been submitted and the Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

- (b) The requirements of the New Source Performance Standard for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, 40 CFR 60.40, Subpart D, are not included in the permit for the boilers at this source. The heat input capacities of the eight (8) boilers, identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #5(N), Boiler #1(S), Boiler #2(S) and Boiler #3(S), are each less than 250 million British thermal units per hour. Thus, NSPS Subpart D does not apply.
- (c) The requirements of the New Source Performance Standard for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR 60.40, Subpart Da, are not included in the permit for the boilers at source. The heat input capacities of the eight (8) boilers, identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #5(N), Boiler #1(S), Boiler #2(S) and Boiler #3(S), are each less than 250 million British thermal units per hour. Thus, NSPS Subpart Da does not apply.
- (d) The requirements of the New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40, Subpart Db, are not included in the permit for the boilers at source. The eight (8) boilers, identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #5(N), Boiler #1(S), Boiler #2(S) and Boiler #3(S)

were each constructed before the applicability date of June 19, 1984. Thus NSPS Subpart Db does not apply.

- (e) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40, Subpart Dc, are not included in the permit for the boilers at source. The eight (8) boilers, identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #5(N), Boiler #1(S), Boiler #2(S) and Boiler #3(S) were each constructed before the applicability date of June 9, 1989. Thus NSPS Subpart Dc does not apply.
- (f) The requirements of the New Source Performance Standard for the Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60.430, Subpart QQ, are not included in the permit for the printing presses at this source. The presses at this source are heatset and nonheatset offset lithographic printing presses, not rotogravure printing presses; Thus NSPS Subpart QQ does not apply.
- (g) The requirements of the New Source Performance Standard for Flexible Vinyl and Urethane Coating and Printing, 40 CFR 60.580, Subpart FFF, are not included in the permit for the printing presses at this source. The presses at this source are heatset and nonheatset offset lithographic printing presses, not rotogravure printing presses; Thus NSPS Subpart FFF does not apply.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, 40 CFR 63.460, Subpart T, are not included in the permit for the insignificant degreasing operations at this source because halogenated solvents are not used at these facilities; thus NESHAP Subpart T does not apply.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63.820, Subpart KK, are not included in the permit for the printing presses at this source. The presses at this source are heatset and nonheatset offset lithographic printing presses, not publication rotogravures, product and packaging rotogravures, or wide-web flexographic printing presses; thus NESHAP Subpart KK does not apply.
- (j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 3280, Subpart JJJJ, are not included in the permit for the printing presses at this source, because pursuant to 40 CFR 63.3300(c) lithographic web printing presses are specifically excluded from the requirements of this subpart.

State Rule Applicability - Entire Source

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

The source submitted a Preventive Maintenance Plan (PMP) on May 30, 1996. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 1-5-2 (Emergency Reduction Plans)

The source submitted an Emergency Reduction Plan (ERP) on June 21, 2002. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-2 (Prevention of Significant Deterioration)

The source was initially constructed prior to the August 7, 1977 rule applicability date. Pursuant to 326 IAC 2-2 (PSD), this source is a major stationary source since it is not one of the 28 listed source categories and it has the potential to emit greater than 250 tons per year (tpy) of VOC. The source had several modifications since the Title V Operating Permit was issued on June 21, 2002, none of which is a major modification pursuant this rule for the following reasons:

- (a) Pursuant to Minor Source Modification T 107-22646-00052 the one (1) press, identified as Press 250, constructed in 2006, is a modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. There was no netting performed in determining the potential to emit.
- (b) Pursuant to Significant Source Modification T 107-24571-00052 the six (6) presses, identified as Press 210, 211, 212, 213, 214, and 215 approved for construction in 2007 is a modification to an existing major stationary source is not major for Prevention of Significant Deterioration (PSD) because the emissions increase of all attainment regulated pollutants is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to this modification.
- (c) Pursuant to Minor Source Modification T 107-25249-00052 this source added six (6) presses (Presses 210 through 215) under Significant Source Modification 107-24571-00052, issued on October 1, 2007. This source proposes to add an additional press (Press 251) in this source modification (107-25249-00052). IDEM considers the modifications made under SSM 107-24571-00052 and MSM 107-25249 00052 to be a single project because the two modifications occur within one year of each other.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than forty (40) tons of VOC per year, this source has elected to limit the potential to emit of this modification as follows:

In order to render 326 IAC 2-2 not applicable to the modifications performed under SSM 107-24571-00052 and MSM 107-25249-00052, the total VOC content delivered to the applicator of Presses 210, 211, 212, 213, 214, 215, and 251 shall be limited such that VOC emitted shall not exceed 39.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

For presses 210 through 215, VOC emitted shall be based on the following equation:
VOC emissions (tpy) = (ink usage in heatset mode * VOC content * 80% flash off * 3% emitted after controls) + (ink usage in nonheatset mode * VOC content * 5% flash off) + (fountain solution usage in heatset mode * VOC content * 100% flash off * 32.1% emitted after controls) + (fountain solution usage in nonheatset mode * VOC content * 100% flash off) + (manual cleaner usage * VOC content * 50% flash off) + (automatic cleaner usage in heatset mode * VOC content * 61.2% emitted after controls) + (automatic cleaner usage in nonheatset mode * VOC content * 100% flash off)

For press 251, total VOC emitted shall be based on the following equation: VOC emissions (tpy) = (ink usage * VOC content * 5% flash off) + (fountain solution usage * VOC content * 100% flash off) + (manual cleaner usage * VOC content * 50% flash off) + (automatic cleaner usage * VOC content * 100% flash off)

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. The source has a potential to emit greater than two hundred fifty (250) tons per year of VOC. In accordance

with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1. Therefore, the next emission statement for this source must be submitted by July 1, 2008. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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.

State Rule Applicability – Individual Facilities

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

The eight (8) printing presses, identified as Press 250, Press 210, Press 211, Press 212, Press 213, Press 214, Press 215, and Press 251, constructed after July 27, 1997, do not have the potential to emit ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs or greater. All other facilities were constructed prior to July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-1(c), the eight (8) boilers, identified as Boiler #1(N), Boiler #2(N), Boiler #3(N), Boiler #4(N), Boiler #5(N), Boiler #1(S), Boiler #2(S) and Boiler #3(S), shall be limited by 326 IAC 6-2-3 because these facilities were existing and in operation prior to September 21, 1983.

- (a) Pursuant to 326 IAC 6-2-3(b), particulate emissions limitations for the six (6) boilers identified as Boiler #1(N), heat input capacity: 20.9 million British thermal units per hour, Boiler #2(N), heat input capacity: 20.9 million British thermal units per hour, Boiler #3(N), heat input capacity: 20.9 million British thermal units per hour, Boiler #4(N), heat input capacity: 20.9 million British thermal units per hour, Boiler #1(S), heat input capacity: 25.1 million British thermal units per hour, and Boiler #2(S), heat input capacity: 25.1 million British thermal units per hour, which were existing and in operation on or before June 8, 1972, shall be calculated by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Pt = lbs of PM emitted per MMBtu heat input

C = maximum ground level concentration (default = 50 ug/m³)

a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)

h = stack height in feet

Q = total source maximum operating capacity

N = number of stacks in fuel burning operation

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 34}{76.5 * 134^{0.75} * 6^{0.25}} = 0.242 \text{ lb/MMBtu}$$

- (b) Pursuant to 326 IAC 6-2-3(c), the two (2) boilers, identified as Boiler #5(N), heat input capacity: 2.56 million British thermal units per hour, and Boiler #3(S), heat input capacity: 25.1 million British thermal units per hour, which began operation after June 8, 1972, and before September 21, 1983 shall be calculated by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Pt = lbs of PM emitted per MMBtu heat input

C = maximum ground level concentration (default = 50 ug/m³)

a = plume rise factor (default = 0.67 for Q less than 1,000 MMBtu/hr)

h = stack height in feet

Q = total source maximum operating capacity

N = number of stacks in fuel burning operation

- (1) The one (1) boiler, identified as Boiler #5(N), shall be limited as follows:

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 35}{76.5 * 136^{0.75} * 7^{0.25}} = 0.236 \text{ lb/MMBtu}$$

- (2) The one (1) boiler, identified as Boiler #3(S), shall be limited as follows:

$$Pt = \frac{50 \mu\text{g}/\text{m}^3 * 0.67 * 35}{76.5 * 136^{0.75} * 8^{0.25}} = 0.204 \text{ lb/MMBtu}$$

Based upon the emission factors in AP-42, the particulate emissions from the boilers can comply with this rule when combusting natural gas or propane.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) coating operation, identified as In-Line Stainer 192, shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) Pursuant to 326 IAC 6-3-2(e), the particulate from the eight (8) paper trimming and baling processes, identified as Paper Trim #1(N), Paper Trim #2(N), Paper Trim #3(N), Paper Trim #4(N), Paper Trim #1(S), Paper Trim #2(S), Paper Trim #3(S) and Paper Trim #4(S), shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The allowable rate of particulate emissions from each of the eight (8) paper trimming and baling processes shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4.0 tons per hour. The potential to emit particulate from each of the eight (8) paper trimming and baling processes is 8.0 pounds per hour before controls. Therefore, the eight (8) paper trimming and baling processes can comply with this rule.

- (c) Pursuant to 326 IAC 6-3-1(b)(14), the four (4) paper dust transfer and collecting processes, identified as Dust Collector #1(N), Dust Collector #2(N), Dust Collector #1(S),

and Dust Collector #2(S), are exempt from the requirements of 326 IAC 6-3-2 because these processes have potential emissions less than less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential SO₂ emissions from all facilities at this source are less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7-1.1 are not applicable.

326 IAC 8-1-6 (New facilities; general reduction requirements)

- (a) The seven (7) printing presses, identified as Press 285, Press 286, Press 287, Press 288, Press 270, Press 272 and Press 276, were constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) are not applicable to these facilities.
- (b) The VOC usage of the nineteen (19) presses, identified as Press 240, Press 281, Press 245, Press 242, Press 243, Press 289, Press 232, Press 233, Press 238, Press 239, Press 273, Press 260, Press 261, Press 290, Press 291, Press 293, Press 294, Press 295 and Press 296, and the one (1) coating operation, identified as In-line Stainer 192, are each limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) are not applicable to these facilities.
- (c) Pursuant to 326 IAC 8-1-6 and Significant Permit Modification 107-24641-00052 issued on October 19, 2007, the Best Available Control Technology (BACT) for the twelve (12) presses, identified as Press 268, Press 269, Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215 shall be as follows:
 - (1) When operating in heatset mode, Presses 268 and 269 will be controlled by the North Oxidizer, a 7.6 MMBtu per hour thermal oxidizer, and Presses 260, 261, 262, 273, 210, 211, 212, 213, 214 and 215 will be controlled by the regenerative thermal oxidizer system, consisting of one to three operating regenerative thermal oxidizers identified as RTO-1, RTO-2 and RTO-3. The North Oxidizer and the regenerative thermal oxidizer system shall be in operation at all times during which any of the printing presses controlled by the oxidizers/oxidizer system are operating in heatset mode.
 - (A) Pursuant to CP 107-2726 issued on February 26, 1993 and CP 107-2917 issued on April 6, 1993, Presses 268 and 269 shall not be operated in heatset mode until such time that the combustion temperature in the thermal oxidizer has attained the minimum temperature determined in testing requirements to destroy at least 90% of captured VOC.
 - (B) Presses 260, 261, 262, 273, 210, 211, 212, 213, 214 and 215 shall not be operated in heatset mode until such time that the combustion temperature(s) in the thermal oxidizer system has attained the minimum temperature(s) determined in testing requirements to destroy at least 97% of captured VOC.
 - (C) The fountain solution used by Presses 210, 211, 212, 213, 214 and 215 shall not contain greater than 5.0% VOC content by weight, as applied.
 - (D) The solvents used for blanket and roller washes by Presses 210, 211, 212, 213, 214 and 215 shall comply with at least one (1) of the following:

- (i) The solvent shall not have a composite VOC vapor pressure greater than 10 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
- (E) The manual cleaning solvents used by Presses 210, 211, 212, 213, 214 and 215 shall comply with at least one (1) of the following:
 - (i) The solvent shall not have a composite VOC vapor pressure greater than 25 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
- (2) When operating any of Presses 260, 261, 262, 273, 210, 211, 212, 213, 214, 215, 268, and 269 in nonheatset mode:
 - (A) The inks used by that press shall not contain greater than 2.5 pounds of VOC per gallon, as applied;
 - (B) The fountain solution used by that press shall not contain greater than 2.0% VOC content by weight, as applied; and
 - (C) The solvents used for blanket and roller washes by that press shall comply with at least one (1) of the following:
 - (i) The solvent shall not have a composite VOC vapor pressure greater than 10 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
 - (D) The manual cleaning solvents used by that press shall comply with at least one (1) of the following:
 - (i) The solvent shall not have a composite VOC vapor pressure greater than 25 mm Hg at 20°C, or
 - (ii) The solvent shall not contain greater than 2.5 pounds of VOC per gallon, as applied.
- (d) Pursuant to AA 107-17119-00052, issued on February 4, 2003, the amount of VOC delivered to the applicator of Press 258 shall be limited such that VOC emitted is less than ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) Pursuant to AA 107-10512-00052, issued on March 15, 1999, the usage of isopropyl alcohol shall not exceed 750 pounds per consecutive twelve (12) month period as part of the fountain solution.

Compliance with these requirements satisfies the Best Available Control Technology (BACT) requirement in 326 IAC 8-1-6 for both heatset and nonheatset modes.

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

The thirty-two (32) printing presses, and the one (1) coating operation do not fully saturate the substrates, therefore, 326 IAC 8-2-5 (Paper Coating Operations) does not apply. This

determination is consistent with the applicability determinations of the existing presses at this emission source, and is consistent with information contained in U.S. EPA document AP-42, Chapter 4.2.2.6, "Paper Coating."

326 IAC 8-3-1 (Organic Solvent Degreasing Operation)

The degreasing operation was installed prior to January 1, 1980, and is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph County. Therefore, the requirements of 326 IAC 8-3-1 (Organic Solvent Degreasing Operation), are not applicable to the degreasing operation at this source.

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

The thirty-two (32) printing presses are not packaging rotogravure, publication rotogravure, or flexographic printing presses, therefore, 326 IAC 8-5-5 (Graphic Arts Operations) does not apply.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is not located in Lake or Marion Counties and commenced operation prior to October 7, 1974. Therefore, the requirements of 326 IAC 8-6 are not applicable to this source.

326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels)

This source is not located in Clark, Floyd, Lake or Porter Counties. Therefore, the requirements of 326 IAC 8-9 are not applicable to the insignificant storage tanks at this source.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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 source are as follows:

Control Device	Pollutant	Frequency of Testing	Limit or Requirement
North Oxidizer	VOC	Once every 2.5 years	90% destruction efficiency
RTO-1	VOC	Once every 2.5 years	97 % destruction efficiency
RTO-2	VOC	Once every 2.5 years	97 % destruction efficiency
RTO-3	VOC	Once every 2.5 years	97 % destruction efficiency

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

(See entire table on the next page)

Control	Parameter	Frequency	Range	Excursions and Exceedances
North Oxidizer	Operating Temperature	Continuous	1350°F or the temperature required to achieve 90% destruction efficiency.	Response Steps
	Duct pressure or fan amperage	At least once per week	The appropriate duct pressure or fan amperage determined by the Permittee based on the most recent valid stack test	
RTO-1	Operating Temperature	Continuous	1350°F or the temperature required to achieve 97% destruction efficiency.	Response Steps
	Duct pressure or fan amperage	At least once per week	The appropriate duct pressure or fan amperage determined by the Permittee based on the most recent valid stack test	
RTO-2	Operating Temperature	Continuous	1350°F or the temperature required to achieve 97% destruction efficiency.	Response Steps
	Duct pressure or fan amperage	At least once per week	The appropriate duct pressure or fan amperage determined by the Permittee based on the most recent valid stack test	
RTO-3	Operating Temperature	Continuous	1350°F or the temperature required to achieve 97% destruction efficiency.	Response Steps
	Duct pressure or fan amperage	At least once per week	The appropriate duct pressure or fan amperage determined by the Permittee based on the most recent valid stack test	
Dry Filter for In-Line Stainer 192	Placement, integrity and particle loading of the filters	Daily inspections	Normal-Abnormal	Response Steps
	Overspray on the rooftops and the nearby ground while in operation	Weekly observation	Normal-Abnormal	
	Overspray on the rooftops and the nearby ground.	Monthly inspections	Normal-Abnormal	

These monitoring conditions are necessary because the RTOs for the twelve (12) presses, identified as Press 268, Press 269, Press 260, Press 261, Press 262, Press 273, Press 210, Press 211, Press 212, Press 213, Press 214 and Press 215 must operate properly to ensure compliance with 326 IAC 8-1-6 (New facilities; general reduction requirements) and 40 CFR 64.1 (Compliance Assurance Monitoring).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on September 19, 2006.

Conclusion

The operation of this book printing and binding source shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T 107-23664-00052.

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

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Unit	Capacity
North Oxidizer	7.60
RTO-1	1.70
RTO-2	3.00
RTO-3	3.00
Press 268 Dryer	8.73
Press 269 Dryer	4.49
Press 240 Dryer	4.40
Press 281 Dryer	4.40
Press 245 Dryer	4.40
Press 242 Dryer	3.34
Press 243 Dryer	3.34
Press 285 Dryer	8.00

Unit	Capacity
Press 286 Dryer	8.00
Press 287 Dryer	8.00
Press 288 Dryer	8.00
Press 289 Dryer	8.00
Press 262 Dryer	8.73
Press 270 Dryer	3.66
Press 272 Dryer	9.97
Press 273 Dryer	8.73
Press 276 Dryer	9.97
Press 260 Dryer	5.13
Press 261 Dryer	5.13
Press 290 Dryer	4.00

Unit	Capacity
Press 291 Dryer	4.20
Press 293 Dryer	5.50
Press 294 Dryer	5.50
Press 295 Dryer	5.50
Press 296 Dryer	4.40
Press 210 Dryer	3.00
Press 215 Dryer	4.01
Press 211 Dryer	3.00
Press 214 Dryer	4.27
Press 212 Dryer	3.00
Press 213 Dryer	4.27

Total Heat Input Capacity (MMBtu/hr)	190
Potential Throughput (MMCF/yr)	1668

	Pollutant					
	PM*	PM10*	SO2	NOx**	VOC	CO
Emission Factor in lb/MMcf	1.90	7.60	0.600	100	5.50	84.0
Potential Emissions in tons/yr	1.584	6.337	0.500	83.4	4.59	70.0

*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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.00210	0.00120	0.07500	1.80000	0.00340
Potential Emissions in tons/yr	0.001751	0.001001	0.062537	1.500877	0.002835

	HAPs - Metals					Total HAPs
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	1.574
Potential Emissions in tons/yr	0.00042	0.00092	0.00117	0.00032	0.00175	

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

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

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Unit	Capacity
Boiler #1 (N)	20.9
Boiler #2 (N)	20.9
Boiler #3 (N)	20.9
Boiler #4 (N)	20.9
Boiler #5 (N)	2.56
Boiler #1(S)	25.1
Boiler #2(S)	25.1
Boiler #3(S)	25.1

Total Heat Input Capacity (MMBtu/hr)	161
Potential Throughput (MMCF/yr)	1414

	Pollutant					
	PM*	PM10*	SO2	NOx**	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.600	100	5.50	84.0
Potential Emissions in tons/yr	1.344	5.375	0.424	70.7	3.89	59.4

*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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.00210	0.00120	0.07500	1.80000	0.00340
Potential Emissions in tons/yr	0.001485	0.000849	0.053040	1.272951	0.002404

	HAPs - Metals					Total HAPs
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.0004	0.0021	1.335
Potential Emissions in tons/yr	0.00035	0.00078	0.00099	0.00027	0.00149	

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

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

**Appendix A: Emissions Calculations
LPG-Propane - Industrial Boilers**

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Unit	Capacity
Boiler #1 (N)	20.9
Boiler #2 (N)	20.9
Boiler #3 (N)	20.9
Boiler #4 (N)	20.9
Boiler #5 (N)	2.56
Boiler #1(S)	25.1
Boiler #2(S)	25.1
Boiler #3(S)	25.1

Total Heat Input Capacity (MMBtu/hr)	161
Potential Throughput (kgals/year)	15458
Sulfur Content (grains/100ft ³)	0.50

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	0.050 (0.10S)	19.0	0.5 **TOC value	3.2
Potential Emission in tons/yr	4.64	4.64	0.386	147	3.86	24.7

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

SO2 Emission factor = 0.10 x Sulfur Content

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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

**Appendix A: Emissions Calculations
Paper Trim and Paper Dust Transfer**

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Unit ID	Control Efficiency (%)	Process Weight Rate (tons/hr)	Emission Factor (lb/ton)	326 IAC 6-3-2(e) Allowable (lb/hr)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Paper Trim #1(N)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #2(N)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #3(N)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #4(N)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Dust Collector #1(N)	98%	0.050	3.00	0.551	0.150	0.657	0.003	0.013
Dust Collector #2(N)	98%	0.050	3.00	0.551	0.150	0.657	0.003	0.013
Paper Trim #1(S)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #2(S)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #3(S)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Paper Trim #4(S)	90%	4.00	2.00	10.4	8.00	35.0	0.80	3.50
Dust Collector #1(S)	98%	0.050	3.00	0.551	0.150	0.657	0.003	0.013
Dust Collector #2(S)	98%	0.050	3.00	0.551	0.150	0.657	0.003	0.013
Totals:					64.6	282.9	6.4	28.1

Methodology

Emission factor for the paper trim and transfer process is from AP-42, Table 11-13.2, Forming-wool (SCC 3-05-012-08)

Emission factor for the dust collection processes is from AP-42, Table 11-13.2, Unloading and Conveying (SCC 3-05-012-21)

326 IAC 6-3-2(e) Allowable = $4.10(\text{Process Weight Rate})^{0.67}$

E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Potential to emit of PM/PM10 (lbs/hr)(Uncontrolled) = PM/PM10 emission factor (lbs/ton)*Capacity (lbs/hr) * 1 ton / 2000 pounds

Potential to emit of PM/PM10 (Controlled) = Potential to emit of PM/PM10 (uncontrolled) * (1 - control efficiency)

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Facility: In-Line Stainer 192

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Edge Stain	7.56	73.0%	0.0%	73.0%	0.0%	20.7%	0.00089	2520	5.52	5.52	12.4	297	54.2	5.01	26.7	75%
Diluent Solvent	6.70	100%	0.0%	100%	0.0%	0.00%	0.00089	2520	6.70	6.70	15.0	360	65.7	0.00	N/A	75%

PM Control Efficiency: 90.00%

Uncontrolled	27.4	657	120	5.01
Controlled	27.4	657	120	0.501

Methodology

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

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

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 268	1600	128	1291715
Press 269	1600	100	1009152
Press 240	1000	66	416275
Press 281	1100	52	360772
Press 245	1000	66	416275
Press 242	1200	47	355726

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 268															
Controlled by North Oxidizer with a control efficiency of 90%															
Lithographic Ink	1.2	40.0%	80%	1291715	248	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.62	0.00	0.00
Fountain Solution	0.105	11.8%	100%	1291715	8.03	5.00%	10.00%	0.00%	0.00%	0.00%	0.40	0.80	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	1291715	9.69	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.03	0.04
Automatic Cleaning Solvent	0.01	31.1%	100%	1291715	2.01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					268						0.40	0.80	0.62	0.03	0.04
Press 269															
Controlled by North Oxidizer with a control efficiency of 90%															
Lithographic Ink	1.2	40.0%	80%	1009152	194	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.48	0.00	0.00
Fountain Solution	0.105	11.8%	100%	1009152	6.25	5.00%	10.00%	0.00%	0.00%	0.00%	0.31	0.62	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	1009152	7.57	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	1009152	1.57	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					209						0.31	0.62	0.48	0.02	0.03
Press 240															
Lithographic Ink	1.2	40.0%	80%	416275	80	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.20	0.00	0.00
Fountain Solution	0.105	11.8%	100%	416275	2.59	5.00%	10.00%	0.00%	0.00%	0.00%	0.13	0.26	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	416275	3.12	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	416275	0.65	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					86						0.13	0.26	0.20	0.01	0.01
Press 281															
Lithographic Ink	1.2	40.0%	80%	360772	69	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.17	0.00	0.00
Fountain Solution	0.105	11.8%	100%	360772	2.24	5.00%	10.00%	0.00%	0.00%	0.00%	0.11	0.22	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	360772	2.71	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	360772	0.56	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					74.8						0.11	0.22	0.17	0.01	0.01
Press 240															
Lithographic Ink	1.2	40.0%	80%	416275	80	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.20	0.00	0.00
Fountain Solution	0.105	11.8%	100%	416275	2.59	5.00%	10.00%	0.00%	0.00%	0.00%	0.13	0.26	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	416275	3.12	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	416275	0.65	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					86						0.13	0.26	0.20	0.01	0.01
Press 281															
Lithographic Ink	1.2	40.0%	80%	355726	68	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.17	0.00	0.00
Fountain Solution	0.105	11.8%	100%	355726	2.21	5.00%	10.00%	0.00%	0.00%	0.00%	0.11	0.22	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	355726	2.67	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	355726	0.55	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					74						0.11	0.22	0.17	0.01	0.01

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

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

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 243	1200	47	355726
Press 285	825	52	270579
Press 286	825	62	322613
Press 287	825	62	322613
Press 288	825	62	322613
Press 289	825	62	322613

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 243															
Lithographic Ink	1.2	40.0%	80%	355726	68	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.17	0.00	0.00
Fountain Solution	0.105	11.8%	100%	355726	2.21	5.00%	10.00%	0.00%	0.00%	0.00%	0.11	0.22	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	355726	2.67	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	355726	0.55	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					73.7						0.11	0.22	0.17	0.01	0.01
Press 285															
Lithographic Ink	1.2	40.0%	80%	270579	52	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.13	0.00	0.00
Fountain Solution	0.105	11.8%	100%	270579	1.68	5.00%	10.00%	0.00%	0.00%	0.00%	0.08	0.17	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	270579	2.03	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	270579	0.42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					56.1						0.08	0.17	0.13	0.01	0.01
Press 286															
Lithographic Ink	1.2	40.0%	80%	322613	62	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.15	0.00	0.00
Fountain Solution	0.105	11.8%	100%	322613	2.01	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.20	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	322613	2.42	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	322613	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					66.9						0.10	0.20	0.15	0.01	0.01
Press 287															
Lithographic Ink	1.2	40.0%	80%	322613	62	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.15	0.00	0.00
Fountain Solution	0.105	11.8%	100%	322613	2.01	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.20	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	322613	2.42	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	322613	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					66.9						0.10	0.20	0.15	0.01	0.01
Press 288															
Lithographic Ink	1.2	40.0%	80%	322613	62	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.15	0.00	0.00
Fountain Solution	0.105	11.8%	100%	322613	2.01	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.20	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	322613	2.42	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	322613	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					66.9						0.10	0.20	0.15	0.01	0.01
Press 289															
Lithographic Ink	1.2	40.0%	80%	322613	62	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.15	0.00	0.00
Fountain Solution	0.105	11.8%	100%	322613	2.01	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.20	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	322613	2.42	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	322613	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					66.9						0.10	0.20	0.15	0.01	0.01

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

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

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 232	317	25.5	50984
Press 233	317	25.5	50984
Press 238	434	40	109493
Press 239	473	40	119332

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 232															
This press is non-heatset only															
Lithographic Ink	1.2	40.0%	5%	50984	0.61	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	50984	0.32	5.00%	10.00%	0.00%	0.00%	0.00%	0.02	0.03	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	50984	0.38	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	50984	0.08	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					1.4						0.02	0.03	0.00	0.00	0.00
Press 233															
This press is non-heatset only															
Lithographic Ink	1.2	40.0%	5%	50984	0.61	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	50984	0.32	5.00%	10.00%	0.00%	0.00%	0.00%	0.02	0.03	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	50984	0.38	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	50984	0.08	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					1.4						0.02	0.03	0.00	0.00	0.00
Press 238															
This press is non-heatset only															
Lithographic Ink	1.2	40.0%	5%	109493	1.31	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	109493	0.68	5.00%	10.00%	0.00%	0.00%	0.00%	0.03	0.07	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	109493	0.82	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	109493	0.17	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					3.0						0.03	0.07	0.00	0.00	0.00
Press 239															
This press is non-heatset only															
Lithographic Ink	1.2	40.0%	5%	119332	1.43	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	119332	0.74	5.00%	10.00%	0.00%	0.00%	0.00%	0.04	0.07	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	119332	0.89	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	119332	0.19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					3.3						0.04	0.07	0.00	0.00	0.00

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

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VOC and HAPs From Printing Press Operations**

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 262	807	66	335934
Press 270	807	66	335934
Press 272	1000	128	807322
Press 273	1615	128	1303824
Press 276	1200	128	968786
Press 260	1615	36	366701

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 262 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	335934	65	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.16	0.00	0.00
Fountain Solution	0.105	11.8%	100%	335934	2.09	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.21	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	335934	2.52	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	335934	0.52	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					69.6						0.10	0.21	0.16	0.01	0.01
Press 270															
Lithographic Ink	1.2	40.0%	80%	335934	65	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.16	0.00	0.00
Fountain Solution	0.105	11.8%	100%	335934	2.08	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.21	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	335934	2.52	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	335934	0.52	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					69.6						0.10	0.21	0.16	0.01	0.01
Press 272															
Lithographic Ink	1.2	40.0%	80%	807322	155	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.39	0.00	0.00
Fountain Solution	0.105	11.8%	100%	807322	5.02	5.00%	10.00%	0.00%	0.00%	0.00%	0.25	0.50	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	807322	6.05	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	807322	1.26	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					167						0.25	0.50	0.39	0.02	0.03
Press 273 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	1303824	250	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.63	0.00	0.00
Fountain Solution	0.105	11.8%	100%	1303824	8.11	5.00%	10.00%	0.00%	0.00%	0.00%	0.41	0.81	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	1303824	9.78	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.03	0.04
Automatic Cleaning Solvent	0.01	31.1%	100%	1303824	2.03	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					270						0.41	0.81	0.63	0.03	0.04
Press 276															
Lithographic Ink	1.2	40.0%	80%	968786	186	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.47	0.00	0.00
Fountain Solution	0.105	11.8%	100%	968786	6.03	5.00%	10.00%	0.00%	0.00%	0.00%	0.30	0.60	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	968786	7.27	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	968786	1.51	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					201						0.30	0.60	0.47	0.02	0.03
Press 260 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	366701	70	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.18	0.00	0.00
Fountain Solution	0.105	11.8%	100%	366701	2.28	5.00%	10.00%	0.00%	0.00%	0.00%	0.11	0.23	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	366701	2.75	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	366701	0.57	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					76.0						0.11	0.23	0.18	0.01	0.01

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

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VOC and HAPs From Printing Press Operations**

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Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
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Date: November 6, 2008**

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 261	1500	36	340589
Press 290	800	26	131190
Press 291	800	52	262380
Press 293	1000	66	416275
Press 294	1076	66	447912
Press 295	1000	66	416275

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 261 <small>Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%</small>															
Lithographic Ink	1.2	40.0%	80%	340589	65	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.16	0.00	0.00
Fountain Solution	0.105	11.8%	100%	340589	2.12	5.00%	10.00%	0.00%	0.00%	0.00%	0.11	0.21	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	340589	2.55	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	340589	0.53	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					70.6						0.11	0.21	0.16	0.01	0.01
Press 290															
Lithographic Ink	1.2	40.0%	80%	131190	25	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.06	0.00	0.00
Fountain Solution	0.105	11.8%	100%	131190	0.81	5.00%	10.00%	0.00%	0.00%	0.00%	0.04	0.08	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	131190	0.98	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	131190	0.20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					27.2						0.04	0.08	0.06	0.00	0.00
Press 291															
Lithographic Ink	1.2	40.0%	80%	262380	50	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.13	0.00	0.00
Fountain Solution	0.105	11.8%	100%	262380	1.63	5.00%	10.00%	0.00%	0.00%	0.00%	0.08	0.16	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	262380	1.97	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	262380	0.41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					54.4						0.08	0.16	0.13	0.01	0.01
Press 293															
Lithographic Ink	1.2	40.0%	80%	416275	80	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.20	0.00	0.00
Fountain Solution	0.105	11.8%	100%	416275	2.59	5.00%	10.00%	0.00%	0.00%	0.00%	0.13	0.26	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	416275	3.12	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	416275	0.65	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					86.3						0.13	0.26	0.20	0.01	0.01
Press 294															
Lithographic Ink	1.2	40.0%	80%	447912	86	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.22	0.00	0.00
Fountain Solution	0.105	11.8%	100%	447912	2.79	5.00%	10.00%	0.00%	0.00%	0.00%	0.14	0.28	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	447912	3.36	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	447912	0.70	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					92.8						0.14	0.28	0.22	0.01	0.01
Press 295															
Lithographic Ink	1.2	40.0%	80%	416275	80	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.20	0.00	0.00
Fountain Solution	0.105	11.8%	100%	416275	2.59	5.00%	10.00%	0.00%	0.00%	0.00%	0.13	0.26	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	416275	3.12	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	416275	0.65	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					86.3						0.13	0.26	0.20	0.01	0.01

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

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

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 296	860	62	336300
Press 258	505	40.5	128998

Press I.D.	Sheet Capacity (Sheets/hour)	Maximum Sheet Length (Inches)	Maximum Print Width (Inches)	MMin ² /year

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 296															
Lithographic Ink	1.2	40.0%	80%	336300	65	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.16	0.00	0.00
Fountain Solution	0.105	11.8%	100%	336300	2.09	5.00%	10.00%	0.00%	0.00%	0.00%	0.10	0.21	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	336300	2.52	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.01	0.01
Automatic Cleaning Solvent	0.01	31.1%	100%	336300	0.52	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					69.7						0.10	0.21	0.16	0.01	0.01

Press 258		This press is non-heatset only													
Lithographic Ink	1.2	40.0%	5%	128998	1.55	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	128998	0.80	5.00%	10.00%	0.00%	0.00%	0.00%	0.04	0.08	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	128998	0.97	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	128998	0.20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					3.5						0.04	0.08	0.00	0.00	0.00

Press 250		This press is non-heatset only													
Lithographic Ink	1.2	40.0%	5%	127546	1.53	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Fountain Solution	0.105	11.8%	100%	127546	0.79	5.00%	10.00%	0.00%	0.00%	0.00%	0.04	0.08	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	127546	0.96	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.00	0.00
Automatic Cleaning Solvent	0.01	31.1%	100%	127546	0.20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					3.5						0.04	0.08	0.00	0.00	0.00

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

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 organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

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

**Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008**

Press I.D.	Throughput		
	Maximum Line Speed (Feet/Minute)	Maximum Print Width (Inches)	MMin ² /yea
Press 210	2433	50	767271
Press 215	1700	66	707668
Press 211	2433	50	767271
Press 214	2646	66	1101464
Press 212	2433	50	767271
Press 213	2646	66	1101464

Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Organics*	Flash Off %	Throughput (MMin ² /year)	VOC Emissions (tons/year)	Ethylene Glycol (%)	Glycol Ethers (%)	Hydro-quinone (%)	Cumene (%)	Xylene (%)	Ethylene Glycol (tons/year)	Glycol Ethers (tons/year)	Hydro-quinone (tons/year)	Cumene (tons/year)	Xylene (tons/year)
Press 210 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	767271	147	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.37	0.00	0.00
Fountain Solution	0.105	11.8%	100%	767271	4.77	5.00%	10.00%	0.00%	0.00%	0.00%	0.24	0.48	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	767271	5.75	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	767271	1.19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					159						0.24	0.48	0.37	0.02	0.03
Press 215 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	707668	136	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.34	0.00	0.00
Fountain Solution	0.105	11.8%	100%	707668	4.38	5.00%	10.00%	0.00%	0.00%	0.00%	0.22	0.44	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	707668	5.31	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.02
Automatic Cleaning Solvent	0.01	31.1%	100%	707668	1.10	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					147						0.22	0.44	0.34	0.02	0.02
Press 211 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	767271	147	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.37	0.00	0.00
Fountain Solution	0.105	11.8%	100%	767271	4.77	5.00%	10.00%	0.00%	0.00%	0.00%	0.24	0.48	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	767271	5.75	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	767271	1.19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					159						0.24	0.48	0.37	0.02	0.03
Press 214 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	1101464	211	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.53	0.00	0.00
Fountain Solution	0.105	11.8%	100%	1101464	6.85	5.00%	10.00%	0.00%	0.00%	0.00%	0.34	0.69	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	1101464	8.26	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.04
Automatic Cleaning Solvent	0.01	31.1%	100%	1101464	1.71	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					228						0.34	0.69	0.53	0.02	0.04
Press 212 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	767271	147	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.37	0.00	0.00
Fountain Solution	0.105	11.8%	100%	767271	4.77	5.00%	10.00%	0.00%	0.00%	0.00%	0.24	0.48	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	767271	5.75	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.03
Automatic Cleaning Solvent	0.01	31.1%	100%	767271	1.19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					159						0.24	0.48	0.37	0.02	0.03
Press 213 Controlled by RTO-1, RTO-2 or RTO-3 with a control efficiency of 97%															
Lithographic Ink	1.2	40.0%	80%	1101464	211	0.00%	0.00%	0.25%	0.00%	0.00%	0.00	0.00	0.53	0.00	0.00
Fountain Solution	0.105	11.8%	100%	1101464	6.85	5.00%	10.00%	0.00%	0.00%	0.00%	0.34	0.69	0.00	0.00	0.00
Manual Cleaning Solvent	0.03	100.0%	50%	1101464	8.26	0.00%	0.00%	0.00%	0.30%	0.44%	0.00	0.00	0.00	0.02	0.04
Automatic Cleaning Solvent	0.01	31.1%	100%	1101464	1.71	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Totals					228						0.34	0.69	0.53	0.02	0.04

*VOC (Tons/year) = Maximum Coverage pounds per MMin² * Weight % organics (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pound

Methodology

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MM² per Year
VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2000 pounds = Tons per Ye

Appendix A: Emission Calculations
HAP Emissions From Printing Press 251

Company Name: R. R. Donnelley & Sons Company
 Address: 1009 Sloan Street, Crawfordsville, IN 47933-2743
 Permit Number: T 107-23664-00052
 Reviewer: Jeff Scull
 Date: November 6, 2008

Ink, Coating, Fountain, and Solvent HAP Content (Weight %)						
Material	Density (lbs/gal)	Max. Usage (gal/hr)	Weight % Glycol Ethers	Weight % Toluene	Weight % Ethylene Glycol	Flash Off %
Ink (Worst Case - Blue)	9.57	4.45	0.00%	0.12%	0.00%	5%
Fountain Solution	8.72	0.34	10.0%	0.00%	0.00%	100%
Alcohol Substitute	7.91	0.09	0.00%	0.00%	30.0%	100%
Manual Cleaning Solvent	7.66	0.32	0.00%	0.00%	0.00%	50%
Automatic Cleaning Solvent	7.66	0.16	0.00%	0.00%	0.00%	100%
Coating	8.97	9.54	0.00%	0.00%	0.00%	100%

PTE of HAPs (tons/yr)					
Material	Density (lbs/gal)	Max. Usage (gal/hr)	PTE of Glycol Ethers	PTE of Toluene	PTE of Ethylene Glycol
Ink (Worst Case - Blue)	same as above		0.00	0.01	0.00
Fountain Solution			1.30	0.00	0.00
Alcohol Substitute			0.00	0.00	0.94
Manual Cleaning Solvent			0.00	0.00	0.00
Automatic Cleaning Solvent			0.00	0.00	0.00
Coating			0.00	0.00	0.00
Totals			1.30	0.01	0.94
					Total HAPs
					2.25

The cleaning solvent and coating contain no HAPs.

METHODOLOGY

PTE of HAPs (tons/yr) = Density (lbs/gal) x Max. Usage (gal/hr) x Weight % HAP x Flash Off % x 8,760 hrs/yr x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
VOC Emissions from Printing Press 251**

Company Name: R. R. Donnelley & Sons Company
 Address: 1009 Sloan Street, Crawfordsville, IN 47933-2743
 Permit Number: T 107-23664-00052
 Reviewer: Jeff Scull
 Date: November 6, 2008

Printing Press Throughput				
Emission Unit	Description	Maximum Throughput (sheets/hr)	Maximum Print Area (in²)	Throughput (MM in² /year)
Printing Press 251	Nonheatset Lithographic Sheetfed Press	18,000	1,189	187,482

Ink, Coating, Fountain, and Solvent VOCs					
Material	Density (lbs/gal)	Max. Usage (gal/hr)	Weight % VOC	Flash Off %	PTE of VOC (tons/yr)
Ink (Worst Case - Blue)	9.57	4.45	1.24%	5%	0.12
Fountain Solution	8.72	0.34	18.1%	100%	2.35
Alcohol Substitute	7.91	0.09	99.9%	100%	3.12
Manual Cleaning Solvent	7.66	0.32	100%	50%	5.37
Automatic Cleaning Solvent	7.66	0.16	100%	100%	5.37
Coating	8.97	9.54	2.13%	100%	7.98
			Total		24.3

METHODOLOGY

PTE of VOC (tons/yr) = Density (lbs/gal) x Max. Usage (gal/hr) x Weight % VOC x Flash Off % x 8,760 hrs/yr x 1 ton/2,000 lbs

**Appendix A: Emissions Calculations
Emissions Summary**

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Uncontrolled Potential to Emit*

Facility	Pollutants						HAPs									Total HAPs
	PM	PM-10	SO2	NOx	VOC	CO	Formaldehyde	Hexane	Ethylene Glycol	Glycol Ethers	Hydroquinone	Cumene	Xylene	Toluene		
Press 268	-	-	-	-	268	-	0.00	0.00	0.402	0.803	0.620	0.029	0.043	0.000	1.90	
Press 269	-	-	-	-	209	-	0.00	0.00	0.312	0.625	0.484	0.023	0.033	0.000	1.48	
Press 240	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 281	-	-	-	-	75	-	0.00	0.00	0.112	0.224	0.173	0.008	0.012	0.000	0.53	
Press 245	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 242	-	-	-	-	74	-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 243	-	-	-	-	74	-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 285	-	-	-	-	56	-	0.00	0.00	0.084	0.168	0.130	0.006	0.009	0.000	0.40	
Press 286	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 287	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 288	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 289	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 232	-	-	-	-	1	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.05	
Press 233	-	-	-	-	1	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.05	
Press 238	-	-	-	-	3	-	0.00	0.00	0.034	0.068	0.003	0.002	0.004	0.000	0.11	
Press 239	-	-	-	-	3	-	0.00	0.00	0.037	0.074	0.004	0.003	0.004	0.000	0.12	
Press 262	-	-	-	-	70	-	0.00	0.00	0.104	0.209	0.161	0.008	0.011	0.000	0.49	
Press 270	-	-	-	-	70	-	0.00	0.00	0.104	0.208	0.161	0.008	0.011	0.000	0.49	
Press 272	-	-	-	-	167	-	0.00	0.00	0.251	0.502	0.388	0.018	0.027	0.000	1.19	
Press 273	-	-	-	-	270	-	0.00	0.00	0.405	0.811	0.626	0.029	0.043	0.000	1.91	
Press 276	-	-	-	-	201	-	0.00	0.00	0.301	0.603	0.465	0.022	0.032	0.000	1.42	
Press 260	-	-	-	-	76	-	0.00	0.00	0.114	0.228	0.176	0.008	0.012	0.000	0.54	
Press 261	-	-	-	-	71	-	0.00	0.00	0.106	0.212	0.163	0.008	0.011	0.000	0.50	
Press 290	-	-	-	-	27	-	0.00	0.00	0.041	0.081	0.063	0.003	0.004	0.000	0.19	
Press 291	-	-	-	-	54	-	0.00	0.00	0.082	0.163	0.126	0.006	0.009	0.000	0.39	
Press 293	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 294	-	-	-	-	93	-	0.00	0.00	0.139	0.279	0.215	0.010	0.015	0.000	0.66	
Press 295	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 296	-	-	-	-	70	-	0.00	0.00	0.105	0.209	0.161	0.008	0.011	0.000	0.49	
Press 258	-	-	-	-	4	-	0.00	0.00	0.040	0.080	0.004	0.003	0.004	0.000	0.13	
Press 250	-	-	-	-	3	-	0.00	0.00	0.040	0.079	0.004	0.003	0.004	0.000	0.13	
Press 210	-	-	-	-	159	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 215	-	-	-	-	147	-	0.00	0.00	0.219	0.438	0.340	0.016	0.023	0.000	1.04	
Press 211	-	-	-	-	159	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 214	-	-	-	-	228	-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 212	-	-	-	-	159	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 213	-	-	-	-	228	-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 251	-	-	-	-	24	-	0.00	0.00	0.936	1.299	0.000	0.000	0.000	0.011	2.25	
In-Line Stainer 192	5.01	5.01	-	-	120	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paper Trim and Paper Dust Transfer Boilers (Worst Case)	283	283	-	-	-	-	-	-	-	-	-	-	-	-	-	
Boilers (Worst Case)	4.64	5.37	0.424	147	3.89	59.4	0.053	1.27	0.00	0.00	0.00	0.00	0.00	0.00	1.33	
Insignificant Combustion (Dryers & RTOs)	1.58	6.34	0.500	83.4	4.59	70.0	0.063	1.50	0.00	0.00	0.00	0.00	0.00	0.00	1.57	
Total	294	300	0.925	230	3785	129	0.116	2.77	6.54	12.5	8.39	0.406	0.595	0.011	31.4	

Summary continued on next page.

* The emissions before controls or limits.

**Appendix A: Emissions Calculations
Emissions Summary**

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Controlled Potential to Emit*																
Facility	Pollutants						HAPs									Total HAPs
	PM	PM-10	SO2	NOx	VOC	CO	Formaldehyde	Hexane	Ethylene Glycol	Glycol Ethers	Hydroquinone	Cumene	Xylene	Toluene		
Press 268	-	-	-	-	27	-	0.00	0.00	0.402	0.803	0.620	0.029	0.043	0.000	1.90	
Press 269	-	-	-	-	21	-	0.00	0.00	0.312	0.625	0.484	0.023	0.033	0.000	1.48	
Press 240	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 281	-	-	-	-	75	-	0.00	0.00	0.112	0.224	0.173	0.008	0.012	0.000	0.53	
Press 245	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 242	-	-	-	-	74	-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 243	-	-	-	-	74	-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 285	-	-	-	-	56	-	0.00	0.00	0.084	0.168	0.130	0.006	0.009	0.000	0.40	
Press 286	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 287	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 288	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 289	-	-	-	-	67	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 232	-	-	-	-	1	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.05	
Press 233	-	-	-	-	1	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.05	
Press 238	-	-	-	-	3	-	0.00	0.00	0.034	0.068	0.003	0.002	0.004	0.000	0.11	
Press 239	-	-	-	-	3	-	0.00	0.00	0.037	0.074	0.004	0.003	0.004	0.000	0.12	
Press 262	-	-	-	-	2	-	0.00	0.00	0.104	0.209	0.161	0.008	0.011	0.000	0.49	
Press 270	-	-	-	-	70	-	0.00	0.00	0.104	0.208	0.161	0.008	0.011	0.000	0.49	
Press 272	-	-	-	-	167	-	0.00	0.00	0.251	0.502	0.388	0.018	0.027	0.000	1.19	
Press 273	-	-	-	-	8	-	0.00	0.00	0.405	0.811	0.626	0.029	0.043	0.000	1.91	
Press 276	-	-	-	-	201	-	0.00	0.00	0.301	0.603	0.465	0.022	0.032	0.000	1.42	
Press 260	-	-	-	-	2	-	0.00	0.00	0.114	0.228	0.176	0.008	0.012	0.000	0.54	
Press 261	-	-	-	-	2	-	0.00	0.00	0.106	0.212	0.163	0.008	0.011	0.000	0.50	
Press 290	-	-	-	-	27	-	0.00	0.00	0.041	0.081	0.063	0.003	0.004	0.000	0.19	
Press 291	-	-	-	-	54	-	0.00	0.00	0.082	0.163	0.126	0.006	0.009	0.000	0.39	
Press 293	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 294	-	-	-	-	93	-	0.00	0.00	0.139	0.279	0.215	0.010	0.015	0.000	0.66	
Press 295	-	-	-	-	86	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 296	-	-	-	-	70	-	0.00	0.00	0.105	0.209	0.161	0.008	0.011	0.000	0.49	
Press 258	-	-	-	-	4	-	0.00	0.00	0.040	0.080	0.004	0.003	0.004	0.000	0.13	
Press 250	-	-	-	-	3	-	0.00	0.00	0.040	0.079	0.004	0.003	0.004	0.000	0.13	
Press 210	-	-	-	-	5	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 215	-	-	-	-	4	-	0.00	0.00	0.219	0.438	0.340	0.016	0.023	0.000	1.04	
Press 211	-	-	-	-	5	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 214	-	-	-	-	7	-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 212	-	-	-	-	5	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 213	-	-	-	-	7	-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 251	-	-	-	-	1	-	0.00	0.00	0.936	1.299	0.000	0.000	0.000	0.011	2.25	
In-Line Stainer 192	0.501	0.50	-	-	120	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
Paper Trim and Paper Dust Transfer	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-	
Boilers (Worst Case)	4.64	5.37	0.42	147	3.89	59.4	0.053	1.27	0.00	0.00	0.00	0.00	0.00	0.00	1.33	
Insignificant Combustion (Dryers & RTOs)	1.58	6.34	0.500	83.4	4.59	70.0	0.063	1.50	0.00	0.00	0.00	0.00	0.00	0.00	1.57	
Total	35	40	0.925	230	1813	129	0.116	2.77	6.54	12.5	8.39	0.406	0.595	0.011	31.36	

Summary continued on next page.

* The emissions after controls but before limits.

**Appendix A: Emissions Calculations
Emissions Summary**

Company Name: R. R. Donnelley & Sons Company
Address City IN Zip: 1009 Sloan Street, Crawfordsville, IN 47933
Permit Number: T 107-23664-00052
Reviewer: Jeff Scull
Date: November 6, 2008

Limited Potential to Emit*

Facility	Pollutants					HAPs										Total HAPs
	PM	PM-10	SO2	NOx	VOC	CO	Formaldehyde	Hexane	Ethylene Glycol	Glycol Ethers	Hydroquinone	Cumene	Xylene	Toluene		
Press 268	-	-	-	-	27	-	0.00	0.00	0.402	0.803	0.620	0.029	0.043	0.000	1.90	
Press 269	-	-	-	-	21	-	0.00	0.00	0.312	0.625	0.484	0.023	0.033	0.000	1.48	
Press 240	-	-	-	-	less than 25	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 281	-	-	-	-	less than 25	-	0.00	0.00	0.112	0.224	0.173	0.008	0.012	0.000	0.53	
Press 245	-	-	-	-	less than 25	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 242	-	-	-	-	39.0	-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 243	-	-	-	-		-	0.00	0.00	0.111	0.221	0.171	0.008	0.012	0.000	0.52	
Press 285	-	-	-	-	56	-	0.00	0.00	0.084	0.168	0.130	0.006	0.009	0.000	0.40	
Press 286	-	-	-	-	less than 40	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 287	-	-	-	-	less than 40,	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 288	-	-	-	-	total	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.47	
Press 270	-	-	-	-	less than 40	-	0.00	0.00	0.104	0.208	0.161	0.008	0.011	0.000	0.47	
Press 289	-	-	-	-	less than 25	-	0.00	0.00	0.100	0.201	0.155	0.007	0.011	0.000	0.05	
Press 232	-	-	-	-	less than 25,	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.05	
Press 233	-	-	-	-	total	-	0.00	0.00	0.016	0.032	0.002	0.001	0.002	0.000	0.11	
Press 238	-	-	-	-	less than 25	-	0.00	0.00	0.034	0.068	0.003	0.002	0.004	0.000	0.12	
Press 239	-	-	-	-	less than 25	-	0.00	0.00	0.037	0.074	0.004	0.003	0.004	0.000	0.49	
Press 262	-	-	-	-	2	-	0.00	0.00	0.104	0.209	0.161	0.008	0.011	0.000	0.49	
Press 272	-	-	-	-	167	-	0.00	0.00	0.251	0.502	0.388	0.018	0.027	0.000	1.19	
Press 273	-	-	-	-	less than 25	-	0.00	0.00	0.405	0.811	0.626	0.029	0.043	0.000	1.91	
Press 276	-	-	-	-	201	-	0.00	0.00	0.301	0.603	0.465	0.022	0.032	0.000	1.42	
Press 260	-	-	-	-	less than 25	-	0.00	0.00	0.114	0.228	0.176	0.008	0.012	0.000	0.54	
Press 261	-	-	-	-	less than 25	-	0.00	0.00	0.106	0.212	0.163	0.008	0.011	0.000	0.50	
Press 290	-	-	-	-	less than 25	-	0.00	0.00	0.041	0.081	0.063	0.003	0.004	0.000	0.19	
Press 291	-	-	-	-	less than 25	-	0.00	0.00	0.082	0.163	0.126	0.006	0.009	0.000	0.39	
Press 293	-	-	-	-	less than 25	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 294	-	-	-	-	less than 25	-	0.00	0.00	0.139	0.279	0.215	0.010	0.015	0.000	0.66	
Press 295	-	-	-	-	less than 25	-	0.00	0.00	0.129	0.259	0.200	0.009	0.014	0.000	0.61	
Press 296	-	-	-	-	less than 25	-	0.00	0.00	0.105	0.209	0.161	0.008	0.011	0.000	0.49	
Press 258	-	-	-	-	4	-	0.00	0.00	0.040	0.080	0.004	0.003	0.004	0.000	0.13	
Press 250	-	-	-	-	24.3	-	0.00	0.00	0.040	0.079	0.004	0.003	0.004	0.000	0.13	
Press 210	-	-	-	-	less than 39.66, total	-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 215	-	-	-	-		-	0.00	0.00	0.219	0.438	0.340	0.016	0.023	0.000	1.04	
Press 211	-	-	-	-		-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 214	-	-	-	-		-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 212	-	-	-	-		-	0.00	0.00	0.239	0.477	0.368	0.017	0.025	0.000	1.13	
Press 213	-	-	-	-		-	0.00	0.00	0.343	0.685	0.529	0.025	0.036	0.000	1.62	
Press 251	-	-	-	-	-	-	0.00	0.00	0.936	1.299	0.000	0.000	0.000	0.011	2.25	
In-Line Stainer 192	0.501	0.501	-	-	less than 25	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paper Trim and Paper Dust Transfer Boilers (Worst Case)	85	85	-	-	-	-	-	-	-	-	-	-	-	-	-	
Boilers (Worst Case)	4.64	5.37	0.42	147	3.89	59.4	0.053	1.27	0.00	0.00	0.00	0.00	0.00	0.00	1.33	
Insignificant Combustion (Dryers & RTOs)	1.58	6.34	0.500	83.4	4.59	70.0	0.063	1.50	0.00	0.00	0.00	0.00	0.00	0.00	1.57	
Total	92	97	0.925	230	less than 1134.44	129	0.116	2.77	6.54	12.5	8.39	0.406	0.595	0.011	31.4	

* The emissions after controls and limits.