



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

September 8, 2004

100 North Senate Avenue  
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Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: R.R. Donnelley & Sons Company / 085-18925-00009

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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, Room 1049, 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.

September 8, 2004

Mr. Joe Kingan  
R.R. Donnelley & Sons Company  
P.O. Box 837  
Warsaw, Indiana 46581-0837

Re: 085-18925-00009  
First Reopening for  
Part 70 T085-6040-00009

Dear Mr. Kingan:

The Office of Air Quality has determined that it is necessary to reopen your Part 70 permit. Pursuant to 326 IAC 2-7-9(a)(3), the Part 70 permit must be revised to include Prevention of Significant Deterioration (PSD) BACT requirements, regarding presses WRO-491, WRO-492 and WRO 493 established in CP 085-3117-00009 and CP085-4396-00009. This change will be made to your permit to be consistent with state and federal law. Pursuant to 326 IAC 2-7-9(c) this will serve as your official notification. The following changes were made:

Pages 3 and 4 were updated to correct typographical headings so the index title matched the headings in section D.2 of the Part 70 permit.

**D.2 FACILITY OPERATION CONDITIONS - Presses**

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

- D.2.1 Volatile Organic Compounds (VOCs) [326 IAC 8-5-5]
- D.2.2 ~~PSD Synthetic Minor Limit~~ **VOC Limits** [326 IAC 2-2] [40 CFR 52.21]
- D.2.3 PSD BACT Limitations [326 IAC 2-2] [40 CFR 52.21]
- D.2.4 VOC Control Requirement [326 IAC 2-2] [40 CFR 52.21]
- D.2.5 NSPS Requirements [326 IAC 12] [40 CFR 60, Subpart QQ]
- D.2.6 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]
- D.2.7 Printing and Publishing NESHAP [326 IAC 14] [40 CFR Part 63, Subpart KK]
- D.2.8 General Provisions Relating to NESHAP [326 IAC 14][40 CFR Part 63, Subpart A **KK**]
- D.2.9 Cold Cleaner Requirements [326 IAC 8-3-2]
- D.2.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements (added to index)**

- D.2.11 Monitoring to Demonstrate Continuous Compliance [326 IAC 14] [40 CFR Part 63, Subpart KK]
- D.2.12 Compliance Determination [326 IAC 12] [40 CFR 60, Subpart QQ] **[326 IAC 2-2]**

Page 6, deleted WRO-494 press.

- (5) WRO-491, WRO-492, and WRO-493, installed in August 1994, February 1995 and October 2002, respectively ~~and WRO-494, not yet installed~~, with each press having a maximum printing width of 125 inches and a maximum line speed of 3000 feet per minute, and enclosed by permanent total enclosure (PTE). ~~WRO-494 is a pre-approved press at the time of this permit issuance under Construction Permit PSD/GP085-4396-00009,~~

Page 31, Facility Description, (a)(5), deleted the reference to WRO-494 and added a paragraph (b) to Section D.2.1.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) Thirteen (13) publication rotogravure printing presses, each using a carbon adsorption solvent recovery system with seventeen (17) adsorbers as control, described as follows:
- (a) WR-429, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute, and enclosed by permanent total enclosure (PTE),
  - (b) WRO-487, with a maximum printing width of 69 inches and a maximum line speed of 2000 feet per minute,
  - (c) WRO-488 and WRO-489, with each press having a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute,
  - (d) WRO-490, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2756 feet per minute,
  - (e) WRO-491, WRO-492, and WRO-493, installed in August 1994, February 1995 and October 2002, respectively, and WRO-494, not yet installed, with each press having a maximum printing width of 125 inches and a maximum line speed of 3000 feet per minute, and enclosed by permanent total enclosure (PTE). WRO-494 is a pre-approved press at the time of this permit issuance under Construction Permit PSD/CP085-4396-00009;

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

#### D.2.1 Volatile Organic Compounds (VOCs) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5 (Graphics Arts Operations), the publication rotogravure presses shall be controlled by a carbon adsorption solvent recovery system that reduces the volatile organic emissions from the capture system by at least ninety percent (90%) by weight. ~~The capture system shall attain an efficiency sufficient to achieve, at minimum, an overall control efficiency, in conjunction with the emission control system, of seventy-five percent (75%). The specific units are limited as follows:~~
- (b) Pursuant to 326 IAC 8-5-5 (Graphic Arts Operations) ~~The the~~ capture system shall attain an efficiency sufficient to achieve, at minimum, an overall control efficiency, in conjunction with the emission control system, of seventy-five percent (75%).

~~(a) for rotogravure presses WRO-488 and WRO-489, a ducted capture system to the solvent recovery system with total control efficiency of no less than 75% on a monthly basis.~~

~~(b) for rotogravure presses WRO-491, WRO-492, WRO-493, and WRO-494;~~

~~(1) daily adsorber efficiency of no less than 95%;~~

~~(2) rolling 12 month average of no less than 98% adsorber efficiency, and~~

~~(3) PTE (100% capture).~~

Page 32, D.2.3, PSD BACT Limitations, added a sub-paragraph (b).

#### D.2.3 PSD BACT Limitations [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (PSD BACT Limitations), the specific facilities have the following limitations:

- (a) for proof press WCM-450;
  - (1) no greater than 8.5 tons per month volatile organic solvents input limit, and
  - (2) PTE (100% capture).

- (b) Pursuant to CP 085-3117-00009, issued December 10, 1993 and CP 085-4396-00009, issued on November 27, 1995, BACT is as follows for presses WRO-491, WRO-492 and WRO-493:
- (1) Daily adsorber efficiency of no less than 95%;
  - (2) Rolling 12 month average of no less than 98% adsorber efficiency; and
  - (3) Permanent total enclosure (PTE) which is equivalent to 100% capture efficiency.

Page 33, D.2.5 and D.2.6, deleted references to press WRO 494.

D.2.5 NSPS Requirements [326 IAC 12] [40 CFR 60, Subpart QQ]

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- (c) Publication Rotogravure Printing [326 IAC 12] [40 CFR 60, Subpart QQ]:

- (1) Pursuant to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430 through 60.435, Subpart QQ) emissions of volatile organic compounds (VOC) from rotogravure presses WR-429, WR-441, WR-442, WR-443, WR-444, WRO-490, WRO-491, WRO-492 **and**, WRO-493, ~~and WRO-494~~ shall not be greater than or equal to 16 percent of the total mass of VOC solvent and water used during any one performance averaging period.

D.2.6 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

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- (d) The provisions of 40 CFR 60, Subpart A, apply to the rotogravure presses WR-429, WR-441, WR-442, WR-443, WR-444, WRO-490, WRO-491, WRO-492 **and** WRO-493, ~~and WRO-494~~, except when otherwise specified in 40 CFR 60.430 through 60.435, Subpart QQ.

D.2.12 Compliance Determination [326 IAC 12] [40 CFR 60, Subpart QQ] **[326 IAC 2-2]**

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- (a) The solvent recovery system shall be in operation at all times that any of the rotogravure printing presses, WR-441, WR-442, WR-443, WR-444, WRO-491, WRO-492 **and** WRO-493, ~~and WRO-494~~, and proof presses, WCM-450, and WCM-460, singly or in combination, is in operation, or is being cleaned using organic solvents.

The source can comply with this condition by keeping the record of the malfunction reports of the solvent recovery system; and other malfunction reports of the presses, when the solvent recovery system is operating but the presses are not venting to the solvent recovery system.

- (b) The systems conveying the exhaust gases from the publication rotogravure production printing presses WR-429, WR-441, WR-442, and WR-443; WRO-491, WRO-492 and WRO-493, ~~and WRO-494~~ enclosures to the solvent recovery system shall operate at all times any of the presses in the respective enclosures are in operation, or are being cleaned using organic solvents. These enclosures shall have natural draft opening areas totaling not in excess of 5% of the total area of the walls, floor, and the ceiling of the enclosure. The enclosures shall be equipped with adequate negative pressure ventilation to provide a minimum face air velocity of 200 feet per minute, when all natural draft openings are simultaneously open. A pressure drop of greater than or equal to 0.013 mmHg (0.007 in H<sub>2</sub>O) will demonstrate the 200 feet per minute face air velocity. All cylinder access doors (on the gear side) shall remain closed during the press operations except for the emergency escape. All personnel access doors (on the button side) shall remain closed, except for the momentary opening to allow access of personnel and materials.

Page 36, D.2.16, Reporting Requirements, added sub-paragraph (a) to D.2.3 in line 1.

**D.2.16 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.2.2, D.2.3(a), and D.2.4 and the compliance and performance testing reports required by 40 CFR §63.830 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).

IDEM does acknowledge that the ambient ozone monitoring required pursuant to CP 085-4396-00009, has been performed in an acceptable manner to IDEM. Therefore, this requirement will not be incorporated into the Part 70 operating permit.

All conditions of the permit shall remain unchanged and in effect until a revised permit is issued. Pursuant to 326 IAC 2-7-9(b) the proceedings to reopen and revise your permit shall follow the same procedures as apply to initial Part 70 permit issuance and shall affect only those parts of the Part 70 permit for which cause to reopen exists.

Questions should be directed to Gary Freeman, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Stacey Pfeffer extension 3-2628 or Rachel Meredith extension 3-5691.

Sincerely,  
Original signed by

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

PD/gkf

enclosure: updated pages

cc: Kosciusko County File  
Kosciusko County Health Department  
Air Compliance Section - Doyle Houser  
Compliance Data Section  
IDEM Northern Regional Office  
Air Programs - Chet Bohannon  
Permit Review Section 1 - Gary Freeman

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**R. R. Donnelley & Sons Company  
Warsaw Manufacturing Division  
2801 West Old Road 30  
Warsaw, Indiana 46580-8783**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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.: T085-6040-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 05, 2002 Expiration Date: August 05, 2007

First Reopening: 085-18925-00009	Pages Affected: 3, 4, 6, 31, 32, 33, 34 and 36
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: SEPTEMBER 8, 2004

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

- C.10 Compliance Requirements [326 IAC 2-1.1-11]
- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- C.19 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]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

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

**D.1 FACILITY OPERATION CONDITIONS - Boilers**

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

- D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2]
- D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]
- D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]
- D.1.4 NSPS for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc] [326 IAC 12]
- D.1.5 Sulfur Dioxide (SO<sub>2</sub>) and Oxides of Nitrogen (NO<sub>x</sub>) PSD Emission Limitations [326 IAC 2-2][40 CFR 52.21]
- D.1.6 Preventive Maintenance Plan

**Compliance Determination Requirements**

- D.1.7 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]
- D.1.8 Sulfur Dioxide Emissions and Sulfur Content

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

- D.1.9 Visible Emissions Notations

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

- D.1.10 Record Keeping Requirements
- D.1.11 Reporting Requirements

**D.2 FACILITY OPERATION CONDITIONS - Presses**

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

- D.2.1 Volatile Organic Compounds (VOCs) [326 IAC 8-5-5]
- D.2.2 VOC Limits [326 IAC 2-2] [40 CFR 52.21]
- D.2.3 PSD BACT Limitations [326 IAC 2-2] [40 CFR 52.21]
- D.2.4 VOC Control Requirement [326 IAC 2-2] [40 CFR 52.21]
- D.2.5 NSPS Requirements [326 IAC 12] [40 CFR 60, Subpart QQ]

- D.2.6 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]
- D.2.7 Printing and Publishing NESHAP [326 IAC 14] [40 CFR Part 63, Subpart KK]
- D.2.8 General Provisions Relating to NESHAP [326 IAC 14][40 CFR Part 63, Subpart KK]
- D.2.9 Cold Cleaner Requirements [326 IAC 8-3-2]
- D.2.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.2.11 Monitoring to Demonstrate Continuous Compliance [326 IAC 14] [40 CFR Part 63, Subpart KK] [326 IAC 2-2]
- D.2.12 Compliance Determination [326 IAC 12] [40 CFR 60, Subpart QQ]

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

- D.2.13 Monitoring Requirements [326 IAC 14][40 CFR 63.828]
- D.2.14 Carbon Adsorption Unit Monitoring

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

- D.2.15 Record Keeping Requirements
- D.2.16 Reporting Requirements

**D.3 FACILITY OPERATION CONDITIONS - Chromium Plating Lines**

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

- D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]
- D.3.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]
- D.3.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]
- D.3.4 Work Practice Standards [326 IAC 14][40 CFR 63.342(f)]
- D.3.5 Operation and Maintenance Plan [326 IAC 14] [40 CFR 63.342(f)(3)]

**Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]**

- D.3.6 Performance Testing [326 IAC 2-1.1-11][326 IAC 2-7-6(1)] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]

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

- D.3.7 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 63.343(c)]

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

- D.3.8 Record Keeping Requirements [326 IAC 2-7-5(3)] [40 CFR 63.346]
- D.3.9 Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 3-6-4(b)][40 CFR 63.344(a), 63.345 and 63.347]

**D.4 FACILITY OPERATION CONDITIONS - Pneumatic Dust and Paper Collection Systems**

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

- D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]
- D.4.2 PSD Limit [326 IAC 2-2][40 CFR 52.21]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.4.4 Visible Emissions Notations
- D.4.5 Cyclone Inspections
- D.4.6 Cyclone Failure Detection

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a publication rotogravure printing operation.

Responsible Official:	Joe Kingan
Source Address:	2801 West Old Road 30, Warsaw, Indiana 46580-8783
Mailing Address:	P.O. Box 837, Warsaw, Indiana 46581-0837
General Source Phone No.	(574) 267-7101
SIC Code:	2754
County Location:	Kosciusko
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD Rules; Major Source, Section 112 of the Clean Air Act

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

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

- (a) Four (4) natural gas or No. 2 or No. 6 oil fired boilers described as follows:
  - (1) B1, installed in July of 1971 with a maximum rated capacity of 78 MMBtu/hr,
  - (2) B2 and B3, installed in October of 1979, each with a maximum rated capacity of 85 MMBtu/hr,
  - (3) B4, installed in June of 1994, with a maximum rated capacity of 98.4 MMBtu/hr.
- (b) Thirteen (13) publication rotogravure printing presses, each using a carbon adsorption solvent recovery system with seventeen (17) adsorbers as control, described as follows:
  - (1) WR-429, installed in September of 1985, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute, and enclosed by permanent total enclosure (PTE),
  - (2) WRO-487, installed in December of 1971, with a maximum printing width of 69 inches and a maximum line speed of 2000 feet per minute,
  - (3) WRO-488 and WRO-489, installed in March of 1979 and September of 1978, respectively, with each press having a maximum printing width of 70 inches and maximum line speed of 2460 feet per minute,
  - (4) WRO-490, installed in July of 1990, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2756 feet per minute,
  - (5) WRO-491, WRO-492, and WRO-493, installed in August 1994, February 1995 and October 2002, respectively, with each press having a maximum printing width of 125 inches and a maximum line speed of 3000 feet per minute, and enclosed by permanent total enclosure (PTE).

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Thirteen (13) publication rotogravure printing presses, each using a carbon adsorption solvent recovery system with seventeen (17) adsorbers as control, described as follows:
- (1) WR-429, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute, and enclosed by permanent total enclosure (PTE),
  - (2) WRO-487, with a maximum printing width of 69 inches and a maximum line speed of 2000 feet per minute,
  - (3) WRO-488 and WRO-489, with each press having a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute,
  - (4) WRO-490, a tandem press with a maximum printing width of 70 inches and a maximum line speed of 2756 feet per minute,
  - (5) WRO-491, WRO-492, and WRO-493, installed in August 1994, February 1995 and October 2002, respectively, with each press having a maximum printing width of 125 inches and a maximum line speed of 3000 feet per minute, and enclosed by permanent total enclosure (PTE).
  - (6) WR-444, installed in December of 1996, with a maximum printing width of 78 3/4 inches and a maximum line speed of 2450 feet per minute, and, although not required by rule, enclosed by permanent total enclosure (PTE),
  - (7) WR-441, WR-442, WR-443, installed in December of 1996, with each press having a maximum printing width of 78 3/4 inches and a maximum line speed of 2450 feet per minute, and enclosed by permanent total enclosure (PTE).
- (b) Three (3) rotogravure proof presses, using the carbon adsorption solvent recovery system described above as control described as follows:
- (1) WCM-440, with a maximum printing width of 73 inches and a maximum line speed of 400 feet per minute
  - (2) WCM-450, installed in September of 1994, with a maximum printing width of 125 inches and a maximum line speed of 900 feet per minute,
  - (3) WCM-460, installed in December of 1993, with a maximum printing width of 78 7/8 inches and a maximum line speed of 600 feet per minute,
- (c) One (1) gravure cylinder wash machine, identified as GCW, installed in April of 1995, located in the east plant,
- (d) One (1) gravure parts press parts washer, identified as GPW, installed in 1991, located in the east plant
- (e) One (1) gravure cylinder wash machine, identified as WCWM, installed in May of 2000, located in the west plant, using the carbon adsorption solvent recovery system and enclosed by permanent total enclosure (PTE)
- (f) One (1) gravure press parts washer, identified as WGPW, installed in May of 2000, located in the west plant, enclosed by permanent total enclosure (PTE)

(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 Volatile Organic Compounds (VOCs) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5 (Graphics Arts Operations), the publication rotogravure presses shall be controlled by a carbon adsorption solvent recovery system that reduces the volatile organic emissions from the capture system by at least ninety percent (90%) by weight.
- (b) Pursuant to 326 IAC 8-5-5 (Graphics Arts Operations), the capture system shall attain an efficiency sufficient to achieve, at minimum, an overall control efficiency, in conjunction with the emission control system, of seventy-five percent (75%).

#### D.2.2 VOC Limits [326 IAC 2-2] [40 CFR 52.21]

This source is a major PSD source and the following presses have VOC limits such that PSD rules, 326 IAC 2-2 and 40 CFR 52.21, shall not apply:

- (a) for rotogravure press WR-429;
  - (1) rolling 12 month average of 34550 ton per year VOC input (691 ton/yr VOC emissions).
  
- (b) for rotogravure press WRO-490;
  - (1) rolling 12 month average of 4,910 tons per year of VOC input ( average VOC potential to emit of 53.2 tons per 12 consecutive months with compliance determined at the end of each month), and
  - (2) monthly solvent recovery overall efficiency of no less than 87%.
  
- (c) for rotogravure presses WR-441, WR-442, and WR-443;
  - (1) rolling 12 month average of no greater than 789 ton per month VOC input, and
  - (2) rolling 12 month average of no less than 98% absorber efficiency, and
  - (3) PTE (100% capture).
  
- (d) for rotogravure press WR-444 and proof press WCM-460;
  - (1) rolling 12 month average of 260 ton per month VOC input.
  
- (e) for the parts and cylinder washers, WGPW and WCWM:
  - (1) monthly rolling average of 500 tons of VOC input per 12 consecutive months. When operating the carbon adsorption system to achieve this limit, the carbon adsorption system shall maintain an overall control efficiency of 98% per 12 month period, rolled on a monthly basis.
  - (2) In the event that the carbon adsorption system is not operating, the amount of VOC input to the parts and cylinder washers shall be limited such that the VOC input with the carbon adsorption system operating times 0.02 added to the VOC input with the carbon adsorption system not operating shall not exceed VOC emissions of ten (10) tons per twelve (12) consecutive month period, rolled on a monthly basis.

#### D.2.3 PSD BACT Limitations [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (PSD BACT Limitations), the specific facilities have the following limitations:

- (a) for proof press WCM-450;
  - (1) no greater than 8.5 tons per month volatile organic solvents input limit, and
  - (2) PTE (100% capture).
  
- (b) Pursuant to CP 085-3117-00009, issued December 10, 1993 and CP 085-4396-00009, issued on November 27, 1995, BACT is as follows for presses WRO-491, WRO-492 and WRO-493:
  - (1) Daily adsorber efficiency of no less than 95%;
  - (2) Rolling 12 month average of no less than 98% adsorber efficiency; and
  - (3) Permanent total enclosure (PTE) which is equivalent to 100% capture efficiency.

#### D.2.4 VOC Control Requirement [326 IAC 2-2] [40 CFR 52.21]

Rotogravure presses WRO-487, WRO-488, WRO-489 were constructed prior to the applicability date June 19, 1978, of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements. Pursuant to the Construction Permit for Press WR-429, some of the emissions reductions obtained by adding control to these presses were used to net out of later PSD

requirements. Therefore, rotogravure press WRO-487 shall have a ducted capture system to the solvent recovery system with total control efficiency of no less than 75% on a monthly basis.

#### D.2.5. NSPS Requirements [326 IAC 12] [40 CFR 60, Subpart QQ]

##### (a) Publication Rotogravure Printing [326 IAC 12] [40 CFR 60, Subpart QQ]:

- (1) Pursuant to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430 through 60.435, Subpart QQ) emissions of volatile organic compounds (VOC) from rotogravure presses WR-429, WR-441, WR-442, WR-443, WR-444, WRO-490, WRO-491, WRO-492 and WRO-493 shall not be greater than or equal to 16 percent of the total mass of VOC solvent and water used during any one performance averaging period.
- (2) Rotogravure presses WRO-487, WRO-488, and WRO-489 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430 through 60.435, Subpart QQ), because they were constructed before the applicability date of the rule (October 28, 1980).
- (3) Proof presses WCM-440, WCM-450, and WCM-460 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430 through 60.435, Subpart QQ), because proof presses are specifically exempted from that rule.

#### D.2.6 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (f) The provisions of 40 CFR 60, Subpart A, apply to the rotogravure presses WR-429, WR-441, WR-442, WR-443, WR-444, WRO-490, WRO-491, WRO-492 and WRO-493, except when otherwise specified in 40 CFR 60.430 through 60.435, Subpart QQ.
- (g) The provisions of 40 CFR 60, Subpart A, do not apply to rotogravure presses WRO-487, WRO-488, and WRO-489 or proof presses WCM-440, WCM-450, and WCM-460 because the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430 through 60.435, Subpart QQ) does not apply.

#### D.2.7 Printing and Publishing NESHAP [326 IAC 14][40 CFR Part 63, Subpart KK]

The publication rotogravure presses, proof presses, cylinder and parts cleaners, ink and solvent mixing and storage equipment, and solvent recovery system are subject to 40 CFR Part 63, Subpart KK.

The Permittee shall limit the emissions of organic HAPs to no more than eight percent (8%) of the total volatile matter used each month. The emission limitation may be achieved by overall control of at least ninety-two percent (92%) of organic HAPs used, by substitution of non-HAP materials for organic HAPs, or by a combination of capture and control technologies and substitution of materials.

#### D.2.8 General Provisions Relating to NESHAP [326 IAC 14][40 CFR Part 63, Subpart KK]

The provisions of 40 CFR Part 63, Subpart A, apply to the publication rotogravure presses, proof presses, cylinder and parts cleaners, ink and solvent mixing and storage equipment, and solvent recovery system, except when otherwise specified in 40 CFR 63.820 through 63.831, Subpart KK.

#### D.2.9 Cold Cleaner Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the owner or operator of the gravure cylinder wash machines, GCW, and WCWM, and the gravure press parts washers, GPW and WGPW, shall:

- (a) equip each cleaner with a cover,
- (b) equip each cleaner with a facility for draining cleaned parts,
- (c) close the degreaser cover whenever parts are not being handled in the cleaner,
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases,
- (e) provide a permanent, conspicuous label summarizing the operating requirements, and

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

D.2.10 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 the carbon adsorption solvent recovery system.

**Compliance Determination Requirements**

D.2.11 Monitoring to Demonstrate Continuous Compliance [326 IAC 14][40 CFR Part 63, Subpart KK]

- (a) Continuous compliance of the carbon adsorption control system shall be demonstrated by:
  - (1) Performing a liquid-liquid material balance of the affected facility for each month as detailed in §63.824(b)(1)(i); or
  - (2) Using continuous emission monitors, conducting an initial performance test of capture efficiency, and continuously monitoring a site specific operating parameter to assure the capture efficiency as specified in §63.824(b)(1)(ii).
- (b) A performance test demonstrating initial compliance for the solvent recovery system is not required if the Permittee chooses to comply by means of the monthly liquid-liquid material balance. Otherwise, initial performance testing shall be conducted in accordance with the methods specified in §63.827.
- (c) At all time that the carbon adsorption control system for the parts and cylinder washers is in operation and being utilized to demonstrate compliance with the VOC emission limitations, the control system shall be monitored using the inlet and outlet analyzers on the solvent recovery system and monitoring the pressure differential in the enclosure to meet permanent total enclosure requirements.

D.2.12 Compliance Determination [326 IAC 12] [40 CFR 60, Subpart QQ] [326 IAC 2-2]

- (a) The solvent recovery system shall be in operation at all times that any of the rotogravure printing presses, WR-441, WR-442, WR-443, WR-444, WRO-491, WRO-492 and WRO-493, and proof presses, WCM-450, and WCM-460, singly or in combination, is in operation, or is being cleaned using organic solvents.

The source can comply with this condition by keeping the record of the malfunction reports of the solvent recovery system; and other malfunction reports of the presses, when the solvent recovery system is operating but the presses are not venting to the solvent recovery system.

- (b) The systems conveying the exhaust gases from the publication rotogravure production printing presses WR-429, WR-441, WR-442, and WR-443; WRO-491, WRO-492 and WRO-493, enclosures to the solvent recovery system shall operate at all times any of the presses in the respective enclosures are in operation, or are being cleaned using organic solvents. These enclosures shall have natural draft opening areas totaling not in excess of 5% of the total area of the walls, floor, and the ceiling of the enclosure. The enclosures shall be equipped with adequate negative pressure ventilation to provide a minimum face air velocity of 200 feet per minute, when all natural draft openings are simultaneously open. A pressure drop of greater than or equal to 0.013 mmHg (0.007 in H<sub>2</sub>O) will demonstrate the 200 feet per minute face air velocity. All cylinder access doors (on the gear side) shall remain closed during the press operations except for the emergency escape. All personnel access doors (on the button side) shall remain closed, except for the momentary opening to allow access of personnel and materials. If these criteria are met, the VOC capture of the enclosure shall be considered to be 100%.

The source can comply with this condition by keeping the record of the malfunction

#### D.2.14 Carbon Adsorption Unit Monitoring

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- (a) An inspection shall be performed each calendar quarter of the carbon adsorption unit controlling the parts and cylinder washers. All defective beds shall be repaired or replaced. The Permittee is not required to shut down the system in order to conduct the quarterly inspection. The Permittee shall monitor and inspect the carbon adsorption solvent recovery system and the ducted solvent capture system to ensure proper operation and maintenance.
- (b) In the event that a failure of the carbon adsorber has been observed, the affected compartments will be shut down immediately until the failed units have been repaired or replaced.

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

#### D.2.15 Record Keeping Requirements

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- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.3, D.2.4, D.2.5 and D.2.7, the Permittee shall maintain records in accordance with (1) through (8) below. Records maintained for (1) through (8) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP/ VOC usage limits and/or the VOC emission limits established in Conditions D.2.1, D.2.2, D.2.3, D.2.4, D.2.5 and D.2.7.
  - (1) The VOC and HAP content of the inks and cleaning solvents used for each month;
  - (2) The cleanup solvent usage for each month;
  - (3) The total VOC and HAP usage for each month; and
  - (4) The weight of VOCs and HAPs emitted for each compliance period.
  - (5) The liquid-liquid material balances performed in accordance with §63.824.
  - (6) Other applicable record keeping requirements as specified in §63.829 to demonstrate compliance with 40 CFR 63.824, Conditions D.2.4 and D.2.6.
  - (7) The monthly average recovery efficiency for the carbon adsorption system.
  - (8) The malfunction reports of the systems as specified in Condition D.2.8.
- (b) To document compliance with Condition D.2.13, the Permittee shall maintain records of the results of the inspections required under D.2.14.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.16 Reporting Requirements

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A quarterly summary of the information to document compliance with Condition D.2.2, D.2.3(a), and D.2.4 and the compliance and performance testing reports required by 40 CFR §63.830 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).