

217/782-2113

"RENEWAL"  
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

R.R. Donnelley & Sons Company  
Attn: Michael W. Ryan  
801 North Union Street  
Dwight, Illinois 60420-7032

I.D. No.: ID# 105025AAF  
Application No.: 95090125

Date Received: May 23, 2006  
Date Issued: TO BE DETERMINED  
Expiration Date: TO BE DETERMINED

Operation of: Offset Lithographic Printing Plant  
Source Location: 801 North Union Street, Dwight, Livingston County, 60420  
Responsible Official: Stephen G. Seamans, Vice President Manufacturing

This permit is hereby granted to the above-designated Permittee to OPERATE a Printing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/782-2113.

Edward Bakowsky, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

DES:AB:psj

cc: Illinois EPA, FOS, Region 3  
CES  
Lotus Notes

<sup>1</sup> Except as provided in Conditions 1.5 and 8.7 of this permit.

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	4
1.1 Source Identification	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 Source Description	
1.5 Title I Conditions	
2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED	6
3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES	7
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	9
5.0 OVERALL SOURCE CONDITIONS	10
5.1 Applicability of Clean Air Act Permit Program (CAAPP)	
5.2 Area Designation	
5.3 Source-Wide Applicable Provisions and Regulations	
5.4 Source-Wide Non-Applicability of Regulations of Concern	
5.5 Source-Wide Control Requirements and Work Practices	
5.6 Source-Wide Production and Emission Limitations	
5.7 Source-Wide Testing Requirements	
5.8 Source-Wide Monitoring Requirements	
5.9 Source-Wide Recordkeeping Requirements	
5.10 Source-Wide Reporting Requirements	
5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios	
5.12 Source-Wide Compliance Procedures	
6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS	16
7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS	17
7.1 Heatset/Nonheatset Web Offset Lithographic Printing Presses	
7.2 Nonheatset Offset Lithographic Printing Presses	
7.3 Paper Collection Systems	
7.4 Boilers	
8.0 GENERAL PERMIT CONDITIONS	40
8.1 Permit Shield	

	<u>Page</u>	
8.2	Applicability of Title IV Requirements	
8.3	Emissions Trading Programs	
8.4	Operational Flexibility/Anticipated Operating Scenarios	
8.5	Testing Procedures	
8.6	Reporting Requirements	
8.7	Title I Conditions	
9.0	<b>STANDARD PERMIT CONDITIONS</b>	45
9.1	Effect of Permit	
9.2	General Obligations of Permittee	
9.3	Obligation to Allow Illinois EPA Surveillance	
9.4	Obligation to Comply with Other Requirements	
9.5	Liability	
9.6	Recordkeeping	
9.7	Annual Emissions Report	
9.8	Requirements for Compliance Certification	
9.9	Certification	
9.10	Defense to Enforcement Actions	
9.11	Permanent Shutdown	
9.12	Reopening and Reissuing Permit for Cause	
9.13	Severability Clause	
9.14	Permit Expiration and Renewal	
9.15	General Authority for the Terms and Conditions of this Permit	
10.0	<u>ATTACHMENTS</u>	
1	Example Certification by a Responsible Official	1-1
2	Emissions of Particulate Matter from Process Emission Units	2-1
3	Compliance Assurance Monitoring (CAM) Plan	3-1
4	Guidance	4-1

1.0 SOURCE IDENTIFICATION

1.1 Source

R.R. Donnelley & Sons Company  
801 North Union Street  
Dwight, Illinois 60420-7032  
815/584-2770

I.D. No.: 105025AAF  
County: Livingston  
Standard Industrial Classification: 2752, Lithographic Printing

1.2 Owner/Parent Company

R.R. Donnelley & Sons Company  
111 South Wacker Drive  
Chicago, Illinois 60606-4301

1.3 Operator

R.R. Donnelley & Sons Company  
801 North Union Street  
Dwight, Illinois 60420-7032

Michael W. Ryan  
815/584-4348

1.4 Source Description

R.R. Donnelley & Sons Company is located at 801 N. Union Street in Dwight. The source is an offset lithographic printing plant. The main products are telephone directories, magazines, newspaper inserts and other printed material. Offset lithographic printing presses, boilers and paper collection system are the significant emission units operated at this source.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains "Title I conditions" that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Glue Pots  
Paster Adhesive Operations  
Powder Sprayer  
DM-915 Web Slitter

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Portable Ink Jet Units  
Bulk Ink Tanks  
Air Compressors  
Wrapper Sealing Systems

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

- a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].
- b. Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].
- c. Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.2.4 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

### 3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date of Construction	Emission Control Equipment	Section of the CAAPP permit
Heatset/ Nonheatset Web Offset Lithographic Printing Presses	DM-910	1995	Thermal Oxidizer AB-2	7.1
	DM-923	1980	None	7.1
	DMT-925	1985	Thermal Oxidizer AB-2	7.1
	DMT-927	1983	Thermal Oxidizer AB-2	7.1
	DMT-929	1990	Catalytic Oxidizer AB-1	7.1
Nonheatset Offset Lithographic Printing Presses	DCP-902	1993	None	7.2
	DCP-903	1996	None	7.2
	DM-913	1991	None	7.2
	DM-914	2001	None	7.2
	DM-915	2003	None	7.2
	DM-921	1980	None	7.2
	DM-924	1980	None	7.2
	DM-931	1988	None	7.2
DM-932	1988	None	7.2	
Paper Collection Systems	5 Cyclones (01-05)	1968;1995	None	7.3
	Pneumatic Dust Collection System (06)	1972	Baghouse	7.3
Boilers	Boilers (B1 & B2)	1968	None	7.4

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM and HAP emissions.

### 5.2 Area Designation

5.2.1 This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO<sub>2</sub>, ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>).

### 5.3 Source-Wide Applicable Provisions and Regulations

5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.

5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.3.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- 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.

#### 5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

#### 5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

#### 5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.4 Source-Wide Non-Applicability of Regulations of Concern

This source is not subject to 40 CFR Part 60, Subpart QQ "Standards of Performance for the Graphic Arts Industry: Rotogravure Printing" and 40 CFR Part 63, Subpart KK "National Emission Standards for Printing and Publishing Industry", because the source does not use rotogravure or flexographic printing presses.

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	391.64
Sulfur Dioxide (SO <sub>2</sub> )	0.12
Particulate Matter (PM)	74.49
Nitrogen Oxides (NO <sub>x</sub> )	19.77
HAP, not included in VOM or PM	----
Total	486.02

5.6.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

## 5.7 Source-Wide Testing Requirements

- 5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
  - b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
  - c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

## 5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there may be provisions for unit specific monitoring set forth in Section 7 of this permit.

## 5.9 Source-Wide Recordkeeping Requirements

### 5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

### 5.9.2 Records for HAP Emissions

The Permittee shall maintain records of HAP emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit, pursuant to Section 39.5(7)(b) of the Act.

#### 5.9.3 Records for Other Source-Wide Emission Limitations

The Permittee shall maintain records of the source-wide VOM emissions released from the printing operations identified in Sections 7.1 and 7.2. These records shall be based on the VOM emissions from individual printing presses and calculated in accordance in compliance procedures established in Conditions 7.1.12 and 7.2.12 of this permit.

#### 5.9.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

### 5.10 Source-Wide Reporting Requirements

#### 5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

#### 5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

### 5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source.

## 5.12 Source-Wide Compliance Procedures

### 5.12.1 General Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be based on the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Heatset/Nonheatset Web Offset Lithographic Printing Presses

7.1.1 Description

Web offset printing presses are used for printing of directories, magazines, newspaper inserts and other printed material. These printing presses can be used in the heatset mode of operation or the nonheatset mode of operation.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Heatset/Nonheatset Web Offset Lithographic Printing Presses (When operated in the nonheatset mode, use of emission control equipment is not required.)	DM-910	1995	Thermal Oxidizer AB-2
	DM-923	1980	None
	DMT-925	1985	Thermal Oxidizer AB-2
	DMT-927	1983	Thermal Oxidizer AB-2
	DMT-929	1990	Catalytic Oxidizer AB-1

7.1.3 Applicable Provisions and Regulations

- a. An "affected offset lithographic printing press" for the purpose of these unit specific conditions is an emission unit described in Conditions 7.1.1 and 7.1.2 above.
- b. The owner or operator of the affected offset lithographic printing presses shall not operate the printing lines unless the following conditions are complied with 35 IAC 215.408(b):  
  
No owner or operator may cause or allow the operation of a heatset web offset press unless the fountain solution contains no more than eight (8) percent, by weight, of VOM.
- c. Each affected offset lithographic printing press is subject to 35 IAC 212.321(b)(1), which provides that:  
  
No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a

source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

- d. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected offset lithographic printing presses, by complying with 35 IAC 215.408(b), are not subject to 35 IAC Part 215 Subpart K pursuant to 35 IAC 215.403.
- b. If paper coating is performed on the affected offset lithographic printing presses, these coating operations are excluded from applicability of 35 IAC 215.204(c) [35 IAC 215.204(c)].
- c. Offset lithographic printing press DM-923 is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected offset lithographic printing press DM-923 does not use an add-on control device to achieve compliance with the emission limitations or standards.

#### 7.1.5 Control Requirements and Work Practices

- a. The thermal oxidizer AB-2 shall be preheated to a minimum center-bed temperature of 1400<sup>0</sup>F or the temperature at which compliance with the destruction efficiency in Condition 7.1.5(a)(i) was demonstrated during the most recent performance test. This temperature shall be maintained during the printing operations when the thermal oxidizer is used to control emissions from presses when used in the heatset mode of operation. If the average temperature in any 3-hour period falls below 1400<sup>0</sup>F, or the temperature recorded during the performance test, it shall be assumed that VOM emissions are not being destroyed.
- b. The Permittee shall follow good operating practices for the thermal and catalytic oxidizers, including periodic inspection, routine maintenance and repair of defects. On the catalytic oxidizer AB-1, the Permittee shall replace the catalyst as needed in order to maintain its required destruction efficiency.
- c. Permittee is authorized to use propane as an alternate fuel.

- d. The Permittee is allowed to operate the affected offset lithographic printing presses without air pollution control equipment (oxidizers AB-1 and AB-2), if such operation will not result in exceedance of emission limits established in Conditions 5.6.1 and 7.1.6. Compliance with those emission limits shall be verified by compliance procedures of Condition 7.1.12.
- e. When used in the nonheatset mode, control of these presses by the catalytic oxidizer or thermal oxidizer is not required.
- f. These conditions are established pursuant to 39.5(7) of the Act.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected heatset offset lithographic printing presses are subject to the following:

- a. Emissions of volatile organic material from printing press DM-910 shall not exceed 5.0 tons per month and 39.6 tons per year.

The above limitations were established in Permit 95090125, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above limitations contain revisions to previously issued Permit 95060173, as reflected in this Title V permit issued on February 26, 2002. Specifically, production limits on individual materials have been removed and annual VOM emissions have been increased by 1.2 tons [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

- b. Emissions of volatile organic material from offset lithographic printing presses DM-923, DMT-925, DMT-927, and DMT-929 and nonheatset offset lithographic printing presses described in Section 7.2 (DM-921, DM-924, DM-931, DM-932) shall not exceed 30 tons per month and 240.4 tons per year.

The above limitations were established in Permit 95090125, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above

limitations contain revisions to previously issued Permits 83050038, 85040038 and 90070035, as reflected in this Title V permit issued on February 26, 2002. Specifically, emission limits have been combined and production limits on individual materials have been removed [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

#### 7.1.7 Testing Requirements

- a. The following testing procedures should be performed as required by 35 IAC 215.409:

The volatile organic material content of fountain solution and all coatings shall be determined by Method 24, 40 CFR 60, Appendix A, incorporated by reference in Section 215.105. The volatile organic material content of printing inks shall be determined by Method 24A, 40 CFR Part 60, Appendix A, incorporated by reference in Section 215.105. Any alternate test method must be approved by the Agency, which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Agency determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Agency shall approve the proposed alternative.

- b. The following testing procedures should be performed as required by 35 IAC 215.410:

- i. Any tests of volatile organic material emissions, including tests conducted to determine control equipment efficiency or control device destruction efficiency, shall be conducted in accordance with the methods and procedures specified in Section 215.102.
- ii. Upon a reasonable request by the Agency, the owner or operator of a volatile organic material emission source required to comply with the limits of this Subpart shall conduct emissions testing, at his own expense, to demonstrate compliance.
- iii. A person planning to conduct a volatile organic material emissions test to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

#### 7.1.8 Monitoring Requirements

- a. The thermal oxidizer (AB-2) shall be equipped with a continuous temperature indicator and strip chart recorder or electronic storage to record the thermal oxidizer temperature whenever the oxidizer is controlling emissions from any of the affected heatset offset lithographic printing presses DM-910, DMT-925 or DMT-927.
- b. The catalytic oxidizer (AB-1) shall be equipped with a continuous temperature indicators and either strip chart recorders or electronic storage for the pre and post-catalyst bed temperatures in order that the temperature rise across the bed may be calculated whenever the oxidizer is controlling emissions from the affected heatset offset lithographic printing press DMT-929.
- c. During any period that the strip chart recorder or electronic storage for AB-1 or AB-2 is inoperable and the oxidizer is controlling emissions from any of the affected heatset offset lithographic printing presses, the Permittee shall record the temperature information periodically until the continuous recording device is returned to service. This shall satisfy the monitoring provisions of this condition, during any periods when the recorders or electronic storage is inoperable.
- d. Compliance Assurance Monitoring (CAM) Requirements

The affected offset lithographic printing presses DM-910, DMT-925, DMT-927 and DMT-929 (while operating in the heatset mode and controlled by associated oxidizer(s)) are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Tables 1 and 2, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected offset lithographic printing presses to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Thermal oxidizer and catalytic oxidizer monitoring data, including the following records for Compliance Assurance Monitoring (CAM) Requirements:

The Permittee shall maintain records of the monitoring

data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.1.8(d), as required by 40 CFR 64.9(b)(1).

- b. Date and duration when the printing presses operated in the heatset mode without associated oxidizers.
- c. Usage of ink, fountain solution, coating and blanket wash in tons per month.
- d. The VOM content (VOM weight %) of the ink, fountain solution, coating and blanket wash used with basis, accompanied by a copy of the supporting information, e.g., supplier data sheet or test analysis report.
- e. The HAP content (HAP weight %) of the ink, fountain solution, coating and blanket wash used with basis, accompanied by a copy of the supporting information, e.g., supplier data sheet or test analysis report.
- f. Monthly and annual VOM emissions for press DM-910 calculated based on the procedures established in Condition 7.1.12.
- g. Total combined monthly and annual VOM/HAP emissions for all affected heatset offset lithographic printing presses and calculated based on the procedures established in Condition 7.1.12.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected heatset offset lithographic printing presses with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected heatset offset lithographic printing presses with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.
- b. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c)(3) and 64.9(a)(2)(i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected heatset offset lithographic printing presses without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

- a. Upgrades of system fans, ductwork, and electrical components and/or logical sequence of operation.
- b. Installation and operation of automated cleaning solvent application devices.
- c. Use of Ultra-violet (UV) or water based coatings.
- d. Use of vegetable oil based inks.
- e. Use of low-VOM solvents.
- f. Use of either 2-part (Alcohol Substitute + Etch) or 1-part fountain solutions on all presses.
- g. Use of waterless printing process.
- h. Use of propane/air mixture equivalent to the combustion characteristics of natural gas, in the press dryers and oxidizers.
- i. Operation of controlled presses without the pollution control equipment, if such operation will not result in emissions above the allowable emissions limitations set forth in this permit.

#### 7.1.12 Compliance Procedures

- a. Compliance with emission limitations of Condition 7.1.3(b) shall be based on the appropriate testing and recordkeeping requirements as established in Conditions, 7.1.7 and 7.1.9, respectively.

- b. Compliance with emission limits of Conditions 5.6.1 and 7.1.6 shall be based on the following emission factors and formulas:

Ink VOM Emissions ( $E_I$ ):

$$E_I = C_I(1-R_I)[1-(K)(J_I)]$$

Fountain Solution VOM Emissions ( $E_F$ ):

$$E_F = C_F[1-(K)(J_F)]$$

Automatic Blanket Wash VOM Emissions ( $E_A$ ):

$$E_A = C_A[1-(K)(J_A)]$$

Manual Blanket Wash VOM Emissions ( $E_M$ )

$$E_M = C_M(1-R_M)$$

Total VOM Emissions ( $E_T$ ):

$$E_T = E_I + E_F + E_A + E_M$$

Where:

$C_I$  = Ink VOM consumption (tons)

$C_F$  = Fountain solution VOM consumption (tons)

$C_A$  = Automatic blanket wash VOM consumption (tons)

$C_M$  = Manual blanket wash VOM consumption (tons)

$R_M$  = Retention factor for manual blanket wash  
= 50%, for manual blanket wash with a VOM composite partial vapor pressure less than 10 mmHg at 20°C and the used cleaning towels are kept in closed containers.

= 0% for other manual blanket wash

$R_I$  = Percent of ink VOM retained in printed product  
(nonheatset = 95%, heatset = 20%)

$K$  = Control efficiency of oxidizer (non-heatset = 0%, heatset = 90% when oxidizer is operating)

$J_I$  = Capture efficiency of dryer and control system for ink VOM (nonheatset = 0%, heatset = 100%)

J<sub>F</sub> = Capture efficiency of dryer and control system for fountain solution (nonheatset = 0%, heatset = 70%)

J<sub>A</sub> = Capture efficiency of dryer and control system for automatic blanket wash VOM (nonheatset = 0%, heatset = 40% when a blanket wash with a vapor pressure less than 10 mmHg at 20°C is used, otherwise capture efficiency = 0%)

Offset lithographic emission/control factors provided above are originated from USEPA publication EPA-453/R-06-002 "Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing", September 2006.

- c. Fuel combustion emissions shall be calculated based on the following:

Pollutant	Natural Gas Emission Factors for Boilers (lb/10 <sup>6</sup> ft <sup>3</sup> )	LPG Emission Factors for Boilers (lb/10 <sup>3</sup> gal)
NO <sub>x</sub>	100	14
PM	7.6	0.4
SO <sub>2</sub>	0.6	0.10S
VOM	5.5	0.3

These are the emission factors for uncontrolled natural gas combustion, Table 1.4-1, and 1.4-2, AP-42, Volume I, Supplement F, March, 1998 and uncontrolled liquid propane gas combustion, Table 1.5-1, AP-41, Volume I, Supplement B, October 1996.

Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x (The Appropriate Emission Factor) + (LPG Consumed, gal) x (The Appropriate Emission Factor)

- d. All conditions described above are established in accordance with provisions 39.5(7) of the Act.

7.2 Nonheatset Offset Lithographic Printing Presses

7.2.1 Description

Nonheatset offset lithographic printing presses are being used to print telephone directories, covers and other material. Printing presses DCP-902 and DCP-903 are sheet-fed offset presses while the other printing presses listed in Condition 7.2 are web offset presses.

Note: This narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Sheet-fed Presses	DCP-902	1993	None
	DCP-903	1996	None
Web Offset Presses	DM-913	1991	None
	DM-914	2001	None
	DM-915	2003	None
	DM-921	1980	None
	DM-924	1980	None
	DM-931	1988	None
	DM-932	1988	None

7.2.3 Applicable Provisions and Regulations

- a. An "affected nonheatset offset lithographic printing press" for the purpose of these unit specific conditions is an emission unit described in Conditions 7.2.1 and 7.2.2 above.
- b. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any affected emission unit [35 IAC 215.301]. If no odor nuisance exists this limitation shall apply only to photochemically reactive material.
- c. The affected nonheatset offset lithographic printing presses are subject to 35 IAC 212.321(b)(1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates

specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

- d. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The affected nonheatset offset lithographic printing presses are not subject to provisions of 35 IAC 215.408 because none of these presses is a heatset web offset lithographic printing presses.
- b. If paper coating is performed on the affected nonheatset offset lithographic printing presses, these coating operations are excluded from applicability of 35 IAC 215.204(c) [35 IAC 215.204(c)].
- c. The affected nonheatset offset lithographic printing presses are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected presses do not use an add-on control device to achieve compliance with the emission limitations or standards.

#### 7.2.5 Control Requirements and Work Practices

Control requirements and work practices are not set for the affected nonheatset offset lithographic printing presses.

#### 7.2.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected nonheatset offset lithographic printing presses are subject to the following:

- a. Press DM-914

Emissions of volatile organic material from the printing press DM-914 shall not exceed 3.0 tons per month and 24.1 tons per year.

The above limitations were established in Permit 01010066, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

Compliance with annual limits shall be determined on a

monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

b. Press DM-915

- i. Emissions of volatile organic material from the printing press DM-915 shall not exceed 5.0 tons per month and 26.65 tons per year.
- ii. Emissions of HAPs from the printing line DM-915 shall not exceed 3.0 tons/month and 9.02 tons/year for a single HAP and 4.0 tons/month and 22.0 tons/year for the combination of all HAPs.

The above limitations contain revisions to previously issued Permit 03050052. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, production limits on individual materials have been removed [T1R].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

c. Group of presses (DCP-902, DCP-903, DM-913)

<u>Printing Press</u>	<u>VOM Emissions</u>	
	<u>(ton/month)</u>	<u>(ton/year)</u>
DCP-902	2.3	18.2
DCP-903	2.1	16.8
DM-913	3.2	25.2

The above limitations were established in Permit 95090125, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above

limitations contain revisions to previously issued Permits 92090010 and 96050008, as reflected in this Title V permit issued on February 26, 2002. Specifically, production limits on individual materials have been removed [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

- d. Group of presses (DM-921, DM-924, DM-931, DM-932)

Emissions of volatile organic material from the offset lithographic printing presses (DM-923, DMT-925, DMT-927, DMT-929) described in Section 7.1 and affected nonheatset offset lithographic printing presses DM-921, DM-924, DM-931, and DM-932 shall not exceed 30 tons per month and 240.4 tons per year.

The above limitations were established in Permit 95090125, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above limitations contain revisions to previously issued Permits 83050038, 85040038 and 90070035, as reflected in this Title V permit issued on February 26, 2002. Specifically, emission limits have been combined and production limits on individual materials have been removed [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

#### 7.2.7 Testing Requirements

Upon request by the Illinois EPA, the following testing procedures should be performed as required by 35 IAC 215.409:

The volatile organic material content of fountain solution and all coatings shall be determined by Method 24, 40 CFR 60, Appendix A, incorporated by reference in Section 215.105. The volatile organic material content of printing inks shall be determined by Method 24A, 40 CFR Part 60, Appendix A, incorporated by reference in Section 215.105. Any alternate test method must be approved by the Agency, which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Agency determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Agency shall approve the proposed alternative.

7.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected nonheatset offset lithographic printing presses.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected nonheatset offset lithographic printing presses to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Individual usage of ink, fountain solution, coating and blanket wash for each affected nonheatset web offset printing press in tons/month.
- b. The VOM content of each ink, coating, and solvent in pounds/gallon or percent VOM, as applied on each individual press.
- c. The HAP content of each ink, coating, and solvent in pounds/gallon or percent HAP, as applied on each individual press.
- d. Total monthly and annual VOM and HAP emissions calculated based on the procedures established in Condition 7.2.12.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected nonheatset offset lithographic printing presses with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected nonheatset offset lithographic printing presses with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected nonheatset offset lithographic printing presses without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity

constituting construction or modification of the source, as defined in 35 IAC 201.102.

- a. Upgrades of system fans, ductwork and electrical components and/or logical sequence of operation.
- b. Installation and operation of automated cleaning solvent application devices.
- c. Use of Ultra-violet (UV) or water based coatings.
- d. Use of vegetable oil based inks.
- e. Use of low-VOM solvents.
- f. Use of either 2-part (Alcohol Substitute + Etch) or 1-part fountain solutions on all presses.
- g. Use of waterless printing process.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3 is addressed by the emission testing in accordance with Condition 7.2.7 and the recordkeeping required by Condition 7.2.9.
- b. Compliance with emission limits of Conditions 5.6.1 and 7.2.6 shall be based on the following emission factors and formulas:

Ink VOM Emissions ( $E_I$ ):

$$E_I = C_I(1-R_I)$$

Fountain Solution VOM Emissions ( $E_F$ ):

$$E_F = C_F$$

Automatic Blanket Wash VOM Emissions ( $E_A$ ):

$$E_A = C_A$$

Manual Blanket Wash VOM Emissions ( $E_M$ )

$$E_M = C_M(1-R_M)$$

Total VOM Emissions ( $E_T$ ):

$$E_T = E_I + E_F + E_A + E_M$$

Where:

$C_I$  = Ink VOM consumption (tons)

$C_F$  = Fountain solution VOM consumption (tons)

$C_A$  = Automatic blanket wash VOM consumption (tons)

$C_M$  = Manual blanket wash VOM consumption (tons)

$R_M$  = Retention factor for manual blanket wash  
= 50%, for manual blanket wash with a VOM  
composite partial vapor pressure less than 10  
mmHg at 20°C and the used cleaning towels are  
kept in closed containers.

= 0% for other manual blanket wash

$R_I$  = Percent of ink VOM retained in printed product  
(nonheatset = 95%)

Offset lithographic emission/control factors provided above  
are originated from USEPA publication EPA-453/R-06-002  
"Control Techniques Guidelines for Offset Lithographic  
Printing and Letterpress Printing", September 2006.

- c. All conditions described above are established in  
accordance with provisions 39.5(7) of the Act.

7.3 Paper Collection Systems

7.3.1 Description

Collection systems for handling of bindery and press trim and whole section paper from various locations throughout the facility. The cyclones are considered to be an integral part of the paper collection systems. The pneumatic dust collection system collects paper dust at the point of origination on the book binding lines. Then it transports the dust to the baghouse.

Note: This narrative description is for informational purposes only and is not enforceable.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
5 Cyclones (01-05)	See 7.3.1	1968;1995	None
Pneumatic Dust Collection System (06)	See 7.3.1	1972	Baghouse

7.3.3 Applicable Provisions and Regulations

- a. An "affected paper collection system" for the purpose of these unit specific conditions is a unit as described in Conditions 7.3.1 and 7.3.2 above.
- b. The affected paper collection system constructed after April 14, 1972 is subject to 35 IAC 212.321(b)(1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

- c. The affected paper collection system constructed prior to April 14, 1972 is subject to 35 IAC 212.322(b)(1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any

process emission unit for which construction or modification commenced prior to April 14, 1972, which either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 2) [35 IAC 212.322(a)].

- d. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 7.3.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected paper collection system (Units 01-05) not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected paper collection system does not use an add-on control devices to achieve compliance with an emission limitation or standard.

#### 7.3.5 Control Requirements and Work Practices

The Permittee shall follow good operating practices for the baghouse including periodic inspection, routine maintenance, repair of defects and visual emission checks.

#### 7.3.6 Production and Emission Limitations

Production and emission limitations are not set for the affected paper collection system.

#### 7.3.7 Testing Requirements

The Permittee shall use USEPA Method 9 for testing opacity from the baghouse on a quarterly basis.

#### 7.3.8 Monitoring Requirements

##### Compliance Assurance Monitoring (CAM) Requirements

The pneumatic dust collection system (Unit 06) is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Table 3, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

### 7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected paper collection system to demonstrate compliance with Conditions 5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Operating records of material throughput on a monthly basis.
- b. Amount of dust collected by baghouse on the monthly basis.
- c. Annual emissions of PM calculated in accordance with compliance procedures in Condition 7.3.12.
- d. Records for Compliance Assurance Monitoring (CAM) Requirements.

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.3.8, as required by 40 CFR 64.9(b)(1).

- e. Records of opacity readings.

### 7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected paper collection system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Emissions from the affected paper collection systems in excess of the limits specified in Conditions 7.3.3 and 5.6 within 30 days of such occurrence.
- b. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c)(3) and 64.9(a)(2)(i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents,

other than downtime associated with calibration checks [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected paper collection systems without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

- a. Upgrades of system fans, balers, ductwork, and electrical components and/or logical sequence of operation.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3 is achieved by the proper operation, as required by Condition 7.3.5.
- b. To determine compliance with Condition 5.6, emissions from the affected paper collection systems shall be calculated based on one of the following equation and emission factors:

- i. Pneumatic Dust Collection System

Dust collected based on the records required by Condition 7.3.9(b) and considering a minimum control efficiency of the baghouse of 99%.

$$\text{PM}_{10} \text{ Emissions} = \frac{\text{Amount of Dust Collected}}{0.99 - \text{Amount of Dust Collected}}$$

- ii. Cyclones - Emission factor derived from the records required by Condition 7.3.9(a) and a company-derived emission factor of 1 pound of particulate matter emitted per ton of paper processed.
- c. All conditions described above are established in accordance with provisions 39.5(7) of the Act.

## 7.4 Boilers

### 7.4.1 Description

Steam is produced by the boilers for heating. The capacity of each boiler is 25 million Btu per hour.

Note: This narrative description is for informational purposes only and is not enforceable.

### 7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Boilers	Boilers #1 and #2	1968	None

### 7.4.3 Applicable Provisions and Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions is a unit as described in Conditions 7.4.1 and 7.4.2 above.
- b. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected 50 percent excess air [35 IAC 216.121].
- c. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

### 7.4.4 Non-Applicability of Regulations of Concern

- a. Pursuant to 35 IAC 215.303, any fuel combustion emission unit is not subject to 35 IAC Part 215, Subpart K: Use of Organic Material.
- b. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected boilers do not use an add-on control devices to achieve compliance with an emission limitation or standard.

### 7.4.5 Control Requirements and Work Practices

The affected boilers may be operated with natural gas or propane as the fuel.

7.4.6 Production and Emission Limitations

Production and emission limitations are not set for the affected boilers.

7.4.7 Testing Requirements

Testing requirements are not set for the affected boilers.

7.4.8 Monitoring Requirements

Monitoring requirements are not set for the affected boilers.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas consumption (mmscf/month or therms/month and mmscf/yr or therms/yr) and propane consumption (gal/month and gal/yr) for the affected boilers.
- b. Annual emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.4.12.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected boilers with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions from the affected boilers in excess of the limits specified in Condition 5.6 within 30 days of such occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected boilers without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102.

- a. Upgrades of system electrical components and/or logical sequence of operation.

- b. Use of propane as an alternate fuel.

7.4.12 Compliance Procedures

- a. Compliance with Conditions 7.5.3(b) and (c) is achieved by the proper operation, as required by Condition 7.5.5.
- b. Compliance with the emission limits in Conditions 5.6 is addressed by the records required in Condition 7.5.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	Natural Gas Emission Factor (lb/10 <sup>6</sup> ft <sup>3</sup> )	LPG Emission Factor (lb/10 <sup>3</sup> gal)
PM	7.6	0.6
NO <sub>x</sub>	100.0	19
SO <sub>2</sub>	0.6	0.10S
VOM	5.5	0.3

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998 and uncontrolled liquid propane gas combustion, Table 1.5-1, AP-41, Volume I, Supplement B, October 1996.

Emissions (lb) = natural gas consumed multiplied by the appropriate emission factor plus liquid propane consumed multiplied by the appropriate emission factor.

- c. All conditions described above are established in accordance with provisions 39.5(7) of the Act.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

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

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of

such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

#### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance & Enforcement Section (MC 40)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency  
Bureau of Air  
Air Quality Planning Section (MC 39)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
1021 North Grand Avenue East  
P.O. Box 19506  
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

##### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

## 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

## 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

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 [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA 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. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

**10.0 ATTACHMENTS**

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Attachment 2 Emissions of Particulate Matter from Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. The emissions of particulate matter into the atmosphere in any one hour period from the affected unit shall not exceed the allowable emission rates specified in the following equation:

$$E = C + A (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

- i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- ii. For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c. Limits for Process Emission Units for which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

<u>Metric</u>		<u>English</u>	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.5	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.2.2 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. The emissions of particulate matter into the atmosphere in any one hour period from the affected

unit shall not exceed the allowable emission rates specified in the following equation:

$$E = A (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

i. For process weight rates of 408 Mg/hr (450 T/hr):

	Metric	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	Metric	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units for which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321(c)]:

<u>Metric</u>		<u>English</u>	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00

<u>Metric</u>		<u>English</u>	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.3 Attachment 3 - Compliance Assurance Monitoring (CAM) Plan

Table 1 - PSEU  
Designation:  
Pollutant:

Heatset Printing presses DM-910, DMT-925, DMT-927
VOM, HAP

Indicators:	#1: Oxidizer Operating Temperature	#2: Visual Inspection of Collection System
-------------	------------------------------------	--

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Record the operating temperature of the thermal oxidizer when being used to control emissions from any affected heatset press	Visual inspection of collection dampers, bypass valves and oxidizer stack for visible emissions
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	3-hour average temperature of 1400°F or the temperature from the most recent performance test	Normal operation is identified as no visible emissions
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	A Quality Improvement Plan (QIP) shall be implemented if the duration of total excursions is greater than 5% of operating hours outside the indicator range during the any 6-month period	A Quality Improvement Plan (QIP) shall be implemented if the duration of total excursions is greater than 5% of operating hours outside the indicator range during the any 6-month period

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The recording instrument shall be accurate to within 2.0% of temperature measured or $\pm 20.0^{\circ}$ F, whichever is greater	Visual inspection logs will be maintained to ensure that activity is conducted
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Temperatures recorded on chart paper or electronic media	Records of the inspections conducted and observations made are maintained at the source

<p>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:</p>	<p>Calibration check of the recording instrument will be conducted in accordance with OEM recommendations</p>	<p>N/A</p>
<p>THE MONITORING FREQUENCY:</p>	<p>Continuously, when being used to control emissions from any affected heatset press</p>	<p>Weekly</p>
<p>THE DATA COLLECTION PROCEDURES THAT WILL BE USED:</p>	<p>Automatically recorded on chart paper or electronic media on a continuous basis. Electronic data can be extracted from archives on demand</p>	<p>Weekly visual inspections by a member of the EHS and/or facility maintenance department (or their designee)</p>
<p>THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:</p>	<p>3 hours</p>	<p>N/A</p>

Table 2 - PSEU  
 Designation:  
 Pollutant:

Heatset Printing press DMT-929
VOM, HAP

Indicators:	#1: Oxidizer Operating Temperature	#2: Visual Inspection of Collection System
-------------	------------------------------------	--

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Record the temperature of the inlet and outlet of the catalyst in the oxidizer when being used to control emissions from the affected heatset press	Visual inspection of collection dampers, bypass valves and oxidizer stack for visible emissions
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	3-hour average inlet temperature of 600°F or the temperature from the most recent performance test	Normal operation is identified as no visible emissions
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	A Quality Improvement Plan (QIP) shall be implemented if the duration of total excursions is greater than 5% of operating hours outside the indicator range during the any 6-month period	A Quality Improvement Plan (QIP) shall be implemented if the duration of total excursions is greater than 5% of operating hours outside the indicator range during the any 6-month period

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The recording instrument shall be accurate to within 2.0% of temperature measured or $\pm 20.0^{\circ}$ F, whichever is greater	Visual inspection logs will be maintained to ensure that activity is conducted
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Temperatures recorded manually, on chart paper or electronic media	Records of the inspections conducted and observations made are maintained at the source

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	Calibration check of the recording instrument will be conducted in accordance with OEM recommendations	N/A
THE MONITORING FREQUENCY:	Continuously, when being used to control emissions from the affected heatset press	Weekly
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Automatically recorded on chart paper or electronic media on a continuous basis. Electronic data can be extracted from archives on demand	Weekly visual inspections by a member of the EHS and/or facility maintenance department (or their designee)
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	3 hours	N/A

Table 3 - PSEU  
 Designation:  
 Pollutant:

Pneumatic Dust Collection System
PM <sub>10</sub>

Indicators:

#1: Work Practice/Inspection	#2: Visible Emissions Observation of Baghouse Exhaust
------------------------------	---

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

Conduct internal inspections of the baghouse systems to verify structural integrity	Observations of the baghouse exhaust for visible emissions
---	--

THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

Verification that the integrity of the system has not been jeopardized and it operates as designed	Normal operation is identified as no visible emissions
--	--

QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

N/A	A Quality Improvement Plan (QIP) shall be implemented if the duration of total excursions is greater than 5% of operating hours outside the indicator range during the any 6-month period
-----	---

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

Inspections will adequately identify problems	Visual inspection logs will be maintained to ensure that activity is conducted
---	--

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

Inspection records	Records of the observations made will be maintained at the source
--------------------	---

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

N/A	N/A
-----	-----

THE MONITORING FREQUENCY:

Annually	Weekly
----------	--------

<p>THE DATA COLLECTION PROCEDURES THAT WILL BE USED:</p>	<p>Record results of inspections/observations and any maintenance or corrective actions</p>	<p>Weekly visual inspections by a member of the EHS and/or facility maintenance department (or their designee)</p>
<p>THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:</p>	<p>N/A</p>	<p>N/A</p>

#### Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

[www.epa.state.il.us/air/permits/197-fee.pdf](http://www.epa.state.il.us/air/permits/197-fee.pdf)

AB:psj