

FINAL DRAFT/PROPOSED CAAPP PERMIT
R. R. Donnelley & Sons Company
I.D. No.: 029803AAA
Application No.: 95090095
July 11, 2002

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

R. R. Donnelley & Sons Company
Attn: Isabelle Day, Vice President and Division Director
U.S. Route 45 North
Mattoon, Illinois 61938-1668

Application No.: 95090095

I.D. No.: 029803AAA

Applicant's Designation:

Date Received: September 7, 1995

Operation of: Printing Plant

Date Issued: TO BE DETERMINED

Expiration Date²: DATE

Source Location: U.S. Route 45 North, Mattoon, Coles County

Responsible Official: Isabelle Day, V.P. and Div. Dir.

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 Dan Punzak at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:jar

cc: Illinois EPA, FOS, Region 3

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

R. R. Donnelley & Sons Company
U. S. Route 45 North
Mattoon, Illinois 61938-1668
217/235-0561

I.D. No.: 029803AAA
Standard Industrial Classification: 2752 Printing, Lithographic
Standard Industrial Classification: 2754 Printing, Gravure

1.2 Owner/Parent Company

R. R. Donnelley & Sons Company
77 West Wacker Drive
Chicago, Illinois 60601-1696

1.3 Operator

R. R. Donnelley & Sons Company
U. S. Route 45 North
Mattoon, Illinois 61938-1668

Vicki Howell
217/258-2798

1.4 General Source Description

The Mattoon Manufacturing Division of R. R. Donnelley & Sons Company is located 2.5 miles north of Mattoon, Illinois, on U.S. Route 45. The source produces magazines and catalogs using heatset web offset lithographic and rotogravure printing presses. Other related process equipment located at this source includes pneumatic paper handling system, ink and solvent storage tanks, and fuel combustion devices (boilers).

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	Actual cubic feed per minute (ft ³ /min)
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
Btu	British thermal unit
CAAA	Clean Air Act Amendments
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CMP	Composite Mesh Pad
CR	Chromium
dscm	Dry standard cubic meter
°F	degrees Fahrenheit
FEIN	Federal Employers Identification Number
FIPS	Federal Information Processing Standards
ft ³	cubic foot
gal	gallon
gr	grain
HAP	Hazardous Air Pollutant
HEPA	High Efficiency Particulate Air
HG	Mercury
hr	hour
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
k	thousand
kW	kilowatts
lb	pound
m	meter
mg	milligram
mmBtu/hr	Million Btus per hour
MSDS	Material Safety Data Sheet
MW	Megawatts (1 million watts)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NONVOM	Nonvolatile Organic Material
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration

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psia	pounds per square inch absolute
PTE	Permanent Total Enclosure
PWR	Process Weight Rate
RMP	Risk Management Plan
RTO	Regenerative Thermal Oxidizer
SCC	Source Classification Code
SIC	Standard Industrial Classification Code
SLP	Submerged Loading Pipe
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown and Malfunction (Plan)
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
tpy	tons per year
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOM	Volatile Organic Material

3.0 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:

- Waste Ink/Solvent Recovery System
- Rotogravure Cylinder Machining Area
- Starch Application Systems
- Paster Adhesive Application Areas
- Plate Making Area Film Cleaning
- Ink Jet Printing Systems
- Waste Water Pretreatment Systems
- Gasoline Storage Tank-500 Gallons
- Rotogravure Solvent Storage Tanks

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:

- Waste Pallet Shredding System
- Fountain Solution Preparation System
- Air Compressors
- Copper Plating Tanks
- Rubber Roller Grinders System
- Sitma Wrapper Sealing Systems
- Shrink Wrap Tunnel Systems
- Hot Melt Glue Application Systems
- Gravure Cylinder Polishing System
- Parts Cleaning Tanks
- Painting Activities
- Drain Cleaning Activities
- Wood Block Floor Repair
- Lubricating Sprays
- Clean-Up Sprays

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:

- 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)].

Equipment used for the mixing and blending of materials at ambient temperature to make water based adhesives, provided each material mixed or blended contains less than 5% organic solvent by weight [35 IAC 201.210(a)(9)].

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)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

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)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

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 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 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. 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.

- 3.2.3 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, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

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	Emission Unit Description	Emission Control Equipment
1	Offset Press MM-710	None
2	Offset Press MM-712	None
3	Offset Press MM-714	Tandem RTO System
4	Offset Press MM-715	Tandem RTO System
5	Offset Press MM-716	Tandem RTO System
6	Offset Press MM-717	Tandem RTO System
7	Offset Press MM-719	Tandem RTO System
8	Offset Press MM-721	Tandem RTO System
9	Offset Press MM-723	Tandem RTO System
10	Gravure Press MR-728	Carbon Bed Adsorber Solvent Recovery System
11	Gravure Press MR-729	Carbon Bed Adsorber Solvent Recovery System
12	Gravure Press MR-730	Carbon Bed Adsorber Solvent Recovery System
13	Gravure Press MR-731	Carbon Bed Adsorber Solvent Recovery System
14	Gravure Press MR-732	Carbon Bed Adsorber Solvent Recovery System
15	Gravure Press MR-733	Carbon Bed Adsorber Solvent Recovery System
16	Gravure Press MR-736	Carbon Bed Adsorber Solvent Recovery System
17	Gravure Press MR-737	Carbon Bed Adsorber Solvent Recovery System
18	Gravure Press MR-738	Carbon Bed Adsorber Solvent Recovery System
19 Gravure Tanks as Follows:		
19a	Gravure Tank TF-1 10,000 Gal	SLP ^a
19b	Gravure Tank TF-2 10,000 Gal	SLP
19c	Gravure Tank TF-3 8,000 Gal	SLP
19d	Gravure Tank TF-4 8,000 Gal	SLP
19e	Gravure Tank TF-5 10,000 Gal	SLP
19f	Gravure Tank TF-6 8,000 Gal	SLP
19g	Gravure Tank TF-7 8,000 Gal	SLP
19h	Gravure Tank TF-8 8,000 Gal	SLP
19i	Gravure Tank TF-9 10,000 Gal	SLP
19j	Gravure Tank TF-10 8,000 Gal	SLP
19k	Gravure Tank TF-11 8,000 Gal	SLP
19l	Gravure Tank TF-12 8,000 Gal	SLP
19m	Gravure Tank TF-13 25,000 Gal	SLP
19n	Gravure Tank TF-14 25,000 Gal	SLP
19o	Gravure Tank TF-15 650 Gal	SLP

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Emission Unit	Emission Unit Description	Emission Control Equipment
19p	Gravure Tank TF-16 8,000 Gal	SLP
20	Rotogravure Cylinder Manufacturing Chrome Plating Tank No. 1	Composite Mesh Pads and HEPA Filter
21	Rotogravure Cylinder Manufacturing Chrome Plating Tank No. 2	Composite Mesh Pads and HEPA Filter
22	Rotogravure Cylinder Manufacturing Dechrome System No. 1	None
23	Rotogravure Cylinder Manufacturing Preparation Sinks and Solvent Use	None
24	Cylinder Washer	Carbon Adsorber Solvent Recovery System
Paper Collection System as Follows:		
25	Paper Collection System No. 1	None
26	Paper Collection System No. 3	Baghouse No. 1
27	Paper Collection System No. 5	None
28	Paper Collection System No. 7	None
29	Paper Collection System No. 8	None
Boilers as Follows:		
30	Boiler No. 1 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
31	Boiler No. 2 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
32	Boiler No. 3 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
33	Boiler No. 4 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
34	Boiler No. 5 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
35	Boiler No. 6 Paper, Gas and Oil-Fired, 27.3 mmBtu/hr	Cyclone & Baghouse No. 4 Baghouse No. 5
36	Boiler No. 7, Gas-Fired with No. 2 Oil Backup, 33.5 mmBtu/Hr	None
37	Ash Pulverizer and Handling System	None (Baghouse No.3 integral to process)

^a Submerged Loading Pipe

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.2 Applicable Regulations

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

5.2.2 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.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. 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, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 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.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [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 Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC 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 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, 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.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

- 5.3.1 None of the press groupings are subject to 35 IAC Part 215 Subpart K. All of the presses are subject to 35 IAC Part 215 Subpart P and 35 IAC 215.403 states that emission units complying with Subpart P are not subject to Subpart K.
- 5.3.2 None of the storage tanks, classified as insignificant emission units, are subject to NSPS, Subparts K, Ka or Kb due to either or all of the following: year constructed; size; vapor pressure of material stored.
- 5.3.3 This permit is issued based on the source not being subject to the Accidental Release Provisions regulations in 40 CFR Part 68, because the source does not store any materials that exceed the applicability thresholds of this regulation.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 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 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	3,137.8
Sulfur Dioxide (SO ₂)	61.37
Particulate Matter (PM)	126.9
Nitrogen Oxides (NO _x)	66.5
Total	3,398.77

5.5.2 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.

5.5.3 Other Source-Wide Emission Limitations

Source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with

Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Operating Scenarios

N/A

5.6.3 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.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements within 30 days of discovery, 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.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating HAP Emissions

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- a. Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.
- b. For the purpose of estimating HAP emissions from equipment at the source, the weight percent of each HAP in each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

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6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Emission Unit: Heatset Web Offset Lithographic Presses and Dryers
Control: Regenerative Thermal Oxidizer System.

7.1.1 Description

The lithographic printing process is used to produce magazines, catalogs, books, newspapers, and other printed materials. The Permittee operates nine heatset web offset lithographic printing presses. These offset presses are of a type called “heatset web offset”. Heatset means that the solvent in the ink is evaporated by a heated dryer, in these presses by gas-fired dryers. The word web means that the paper being printed is a long roll that from which the paper web is unwound, printed on and dried prior to being cut and folded. The dryer exhaust gases from the Group 2 controlled presses are directed through a tandem thermal oxidizer air pollution control system. The dryer exhausts from the Group 1 uncontrolled presses are vented directly to the atmosphere. The term oxidizer as used in this permit is technically equivalent to the term afterburner used in 35 IAC.

The oxidizer control system consists of two oxidizers in parallel. Both oxidizers are a type called a regenerative thermal oxidizer (RTO). There is one common duct system and only one of the oxidizers need be operating if the air flow from the operating press dryers does not exceed the capacity of the operating oxidizer. The entire system is computer controlled to determine whether one or two oxidizers need be operating.

Emissions of volatile organic material (VOM) result from the use of printing-related materials such as inks, fountain solution additives, and cleaning solvents. In addition, hazardous air pollutants, as defined under Section 112(a) of the Clean Air Act, such as ethylene glycol (CAS #107211) and glycol ethers, may be emitted.

Natural gas, propane or other liquefied petroleum gas is the fuel used in the press dryers and the tandem thermal oxidizer system. Emissions of CO, NO_x, particulate matter (PM), SO₂, and VOM result from the combustion of this fuel.

7.1.2 LIST OF EMISSION EQUIPMENT AND POLLUTION CONTROL EQUIPMENT

Emission Unit	Emission Group Description	Emission Control Equipment ^a
1, 2	Group 1: Uncontrolled Offset Presses and Dryers, Nos. MM-710 and 712	None
3-9	Group 2: Controlled Offset Presses and Dryers, Nos. MM-714-717, 719, 721, 723	Tandem Regenerative Thermal Oxidizers System

a The tandem RTO system consists of two RTOs. The press dryers vent to a common duct which carries emissions to the RTOs. If only a few of the presses are operating, only one RTO need operate, but if combined air flow

from presses that are operating exceeds the capacity of one RTO, then both are operated.

7.1.3 Applicability Provisions and Applicable Regulations

- a. The “affected lithographic presses” for the purpose of these unit-specific conditions, are controlled and uncontrolled presses identified in Condition 7.1.2.
- b. Each affected lithographic press is subject to the emission limits identified in Condition 5.2.2.
- c. Each affected lithographic press is subject to the 35 IAC 215.408(b). This rule states that any owner or operator of a lithographic printing facility, emitting of 100 ton/yr of VOM in the absence of pollution control equipment, may cause or allow the operation of a heatset web offset press unless the fountain solution contains no more than 8 percent, by weight, of VOM.

7.1.4 Non-Applicability of Regulations of Concern

- a. The drying ovens and the oxidizers associated with the affected presses are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the drying ovens and the oxidizers are not by definition fuel combustion emission units.
- b. This permit is issued based on the affected presses not being subject to 35 IAC 215.204(c) for in-line coating operations as pursuant to a PCB note in 35 IAC 215.204(c) the limit does not apply to equipment used for both printing and coating. The coating must be applied prior to the dryer to meet this exemption.
- c. The affected presses are not subject to 35 IAC 215, Subpart K specifically 35 IAC 215.301, because the affected presses comply with 35 IAC 215, Subpart P [35 IAC 215.403].
- d. The affected presses are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subparts A and KK, because the affected presses are not publication rotogravure, product and packaging gravure, or wide-web flexographic printing presses.
- e. This permit is issued based on the affected uncontrolled presses MM-710 and MM-712 not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected uncontrolled presses MM-710 and MM-712 do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements

- a. For the Group 2 presses, which use control equipment, the air pressure in the dryer is maintained lower than the air pressure of the press room and all of the exhaust is ducted to the RTO system.
- b. The RTOs' combustion chambers shall be preheated to the lesser of the manufacturer's recommended temperature or the temperature at which compliance was demonstrated in the most recent compliance test, before the printing process is begun, and this temperature shall be maintained during operation of the affected Group 2 presses. If the total air flow from all operating Group 2 presses does not require both RTOs, one of them may be shut down or kept in a hot standby mode.
- c. The Permittee shall follow good operating practices for the RTOs, including periodic inspection, routine maintenance and prompt repair of defects.
- d. Each affected press shall only be operated with natural gas or propane as the fuel in the press dryer system and the RTOs.
- e. The RTOs shall be operated to reduce VOM emissions from the dryer exhaust by 97%. [T1]
- f. Notwithstanding Conditions 7.1.5(a), (b) and (e), the Permittee is allowed to operate the Group 2 presses without oxidizer control or with the oxidizer temperature below that specified in Condition 7.1.5(b) if the emissions from the individual presses meet the requirements of Condition 7.1.3(b) and no other permit emissions limitations (e.g., monthly limits in Condition 7.1.6) or requirements will be violated. Emissions from operation under these conditions shall be based on a 0% VOM destruction efficiency.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected presses are subject to the following:

Emissions from the affected presses shall not exceed the following limits:

<u>Lithographic Press No.</u>	<u>VOM Emissions</u>		<u>Permit No.</u>
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	
710	13.8	110.6	81080022
712	16.3	130.6	81080020
714	2.5	20.1	01070002
715	3.5	27.6	01040001
716	3.6	28.5	90060032
717	4.56	36.55	97120012
719	4.2	36.7	96040078
721	6.28	37.67	99070077

- iii. The destruction efficiency of either or both of the RTOs shall be tested to verify the 97% destruction efficiency required by Condition 7.1.5.

7.1.8 Monitoring Requirements

Each RTO shall be equipped with continuous monitoring device which is installed, calibrated, operated and maintained according to vendor specifications or other good operating practices at all times the RTO is in use. The monitoring device shall monitor the temperature of the RTO.

If the continuous recorder is not operating, the Permittee shall record the temperature information every four hours until the continuous recording device is returned to service.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected lithographic press to demonstrate compliance with Conditions 5.5.1, 7.1.5, 7.1.6, 7.1.7, and 7.1.8 pursuant to Section 39.5(7)(b) of the Act:

- a. Records of weight of ink used (amount supplied to press minus amount discarded or recycled) (pounds);
- b. Weight percent VOM in ink (wt. %);
- c. Volume of fountain solution additive used (amount supplied to press minus amount discarded or recycled) (gallons);
- d. Pounds VOM per gallon of fountain solution additive (pounds/gallon);
- e. Volume of manual cleaning solvent used (amount supplied to press minus amount discarded or recycled) (gallons);
- f. Pounds VOM per gallon of manual cleaning solvent (pounds/gallon);
- g. Volume of automatic cleaning solvent used (amount supplied to press minus amount discarded or recycled) (gallons);
- h. Pounds VOM per gallon of automatic cleaning solvent (pounds/gallon);
- i. The aggregate monthly and annual VOM emissions from each of the affected presses (tons/month and tons/year) including a separate value for emissions when the RTOs are not in operation or are operating below the temperature specified in Condition 7.1.5(b);

- j. Temperature monitoring data of each RTO (continuous);
- k. Records of any test for destruction efficiency by the RTOs or composition of any of the materials.
- l. Visible emission observations as required by Condition 7.1.7(f);
- m. Aggregate fuel used in press dryers and RTOs; and
- n. If the Permittee operates the Group 2 presses, which are normally vented to the oxidizer system, without oxidizer control or the oxidizer temperature below that specified in Condition 7.1.5(b) as allowed by Condition 7.1.5(f), then the Permittee shall calculate and keep records of emissions from each press per the requirements of Condition 7.1.9(i) above so that a determination that operation in such manner did not cause a violation of the monthly VOM emission limits in Condition 7.1.6.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected lithographic press or control device operating requirements with the permit requirements within 30 days of discovery 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 of VOM in excess of the limits in Condition 7.1.6 either for the current monthly limit or for the annual limit based on the current month's records plus the preceding 11 months.
- b. Use of fountain solution with a VOM content exceeding the limit in Condition 7.1.3(c).
- c. Opacity in excess of the limits of Condition 5.2.2(b).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected lithographic press 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 process equipment including drives and electrical components, provided that such upgrades-will not increase emissions above the limits of this permit.
- b. Installation and operation of automated cleaning solvent application devices.
- c. Use of UV coatings.
- d. Use of water-based coatings containing less than 0.10 lb VOM per gallon of coating.

7.1.12 Compliance Procedures

- a. Compliance with the applicable regulations in Condition 7.1.3 and the emission limitation in Condition 7.1.6 shall be based on operating within the requirements of Condition 7.1.5 and 7.1.7, monitoring the operation as required by Condition 7.1.8, the recordkeeping and reporting requirements of Conditions 7.1.9 and 7.1.10 and use of the emission factors in Attachment 1.
- b. Emissions from the press dryer and fuel combustion emissions from the oxidizers on the affected presses shall be calculated based on the following emission factors:

i. Natural Gas Firing:

<u>Pollutant</u>	<u>Emission Factor (lb/mmscf)</u>
CO	84
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

ii. Propane Firing:

<u>Pollutant</u>	<u>Emission Factor (lb/1,000 gal)</u>
CO	1.9
NO _x	14
PM	0.4
SO ₂	0.10S
VOM	0.5

These are the emission factors for natural gas and propane combustion, Tales 1.4-1, 1.4-2, and 1.5-1, AP-42, Volume I, Fifth Edition, September 1998.

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Press Dryer System Emissions (lb) = (Fuel Consumed or Firing Rate) x (The
Appropriate Emission Factor)

RTO (lb) = (Fuel Consumed or Firing Rate) x (The Appropriate Emission
Factor)

7.2 Unit: Rotogravure Printing Presses and Dryers
Control: Carbon Bed Adsorber Solvent Recovery System

7.2.1 Description

Rotogravure presses are used to print high quality magazines and other similar printed material. The Permittee uses a carbon adsorption system to recover the solvent it uses. The solvent is composed primarily of toluene, which is a HAP. These presses are part of the affected source subject to a NESHAP for publication rotogravure printing.

There are a number of carbon beds in the control system but they are all considered one system. In a carbon bed system some beds are actively adsorbing the solvent, while others are “offline”, either idle or being regenerated by having the solvent removed from the carbon. The Permittee uses steam for regeneration. The steam and solvent are condensed together and separated (decanted) to recover the solvent for reuse.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
10	Gravure Press MR-728	Carbon Bed Adsorber Solvent Recovery System
11	Gravure Press MR-729	Carbon Bed Adsorber Solvent Recovery System
12	Gravure Press MR-730	Carbon Bed Adsorber Solvent Recovery System
13	Gravure Press MR-731	Carbon Bed Adsorber Solvent Recovery System
14	Gravure Press MR-732	Carbon Bed Adsorber Solvent Recovery System
15	Gravure Press MR-733	Carbon Bed Adsorber Solvent Recovery System
16	Gravure Press MR-736	Carbon Bed Adsorber Solvent Recovery System
17	Gravure Press MR-737	Carbon Bed Adsorber Solvent Recovery System
18	Gravure Press MR-738	Carbon Bed Adsorber Solvent Recovery System
19 Gravure Tanks as Follows:		
19a	Gravure Tank TF-1, 10,000 Gallon	SLP ^a
19b	Gravure Tank TF-2, 10,000 Gallon	SLP ^a
19c	Gravure Tank TF-3, 8,000 Gallon	SLP ^a

Emission Unit	Description	Emission Control Equipment
19d	Gravure Tank TF-4, 8,000 Gallon	SLP ^a
19e	Gravure Tank TF-5, 10,000 Gallon	SLP ^a
19f	Gravure Tank TF-6, 8,000 Gallon	SLP ^a
19g	Gravure Tank TF-7, 8,000 Gallon	SLP ^a
19h	Gravure Tank TF-8, 8,000 Gallon	SLP ^a
19i	Gravure Tank TF-9, 10,000 Gallon	SLP ^a
19j	Gravure Tank TF-10, 8,000 Gallon	SLP ^a
19k	Gravure Tank TF-11, 8,000 Gallon	SLP ^a
19l	Gravure Tank TF-12, 8,000 Gallon	SLP ^a
19m	Gravure Tank TF-13, 25,000 Gallon	SLP ^a
19n	Gravure Tank TF-14, 25,000 Gallon	SLP ^a
19o	Gravure Tank TF-15, 650 Gallon	SLP ^a
19p	Gravure Tank TF-16, 8,000 Gallon	SLP ^a

^a SLP is for submerged loading pipe.

7.2.3 Applicability Provisions and Applicable Regulations

- a. The “affected rotogravure printing presses” for the purpose of these unit-specific conditions, are rotogravure presses vented to a carbon adsorber solvent recovery system and described in Condition 7.2.2.
- b. Each affected rotogravure press is subject to the emission limits identified in Condition 5.2.2.
- c. Each rotogravure press is subject to 35 IAC 215.401(c) and (d). These rules require that the carbon adsorption system reduce the VOM collected by the capture system by 90%, and that the overall VOM control efficiency (capture and control) is at least 75%.

The Permittee has the option to comply with 35 IAC 215.401 (a) or (b). § 215.401(a) states that the volatile fraction of ink as it is applied to substrate must contain 25% or less by volume organic solvent and 75% percent or more water. § 215.401(b) states that the volatile fraction of an ink, as it is applied to the substrate, less water, is 40 percent or less by volume.

- d. Gravure Press Nos. MR-736, MR-737, and MR-738 are subject to a NSPS, 40 CFR 60 Subparts A and QQ (40 CFR 60.430 et. seq.) for publication rotogravure printing. This rule requires that any owner or operator of a publication rotogravure press shall cause to be discharged into the atmosphere VOM equal to more than 16 percent of the total mass of VOM solvent used on the affected presses during any one performance averaging period, i.e., 84% recovery. (40 CFR 60.432)
- e. Each affected rotogravure press is a part of the “affected facility” subject to a NESHAP, 40 CFR 63 Subparts A and KK (63.820 et. seq.) for publication rotogravure printing. This rule only addresses HAP emissions.

The HAP emission limitation for this rule is 8% of the total volatile matter used each month for the affected facility, which includes all presses, proof presses, cylinder and parts cleaners, gravure ink storage and mixing equipment and all other gravure-related equipment and processes.

- f. Startup, Shutdown and Malfunction (SSM) Plan

The Permittee is required to have a written Startup, Shutdown and Malfunction (SSM) Plan for the affected rotogravure presses. [40 CFR 63.6(e)(3)]

The SSM Plan at the site and any revision to that plan is incorporated by reference and is enforceable as a term and condition of this permit.

Revisions to the SSM Plan are automatically incorporated by reference and do not require a permit revision.

- g. An “affected storage tank” for the purpose of these unit-specific conditions, is a storage tank used to store rotogravure inks or solvent used in making inks. The affected tanks are listed in Condition 7.2.2 (Emission Unit 19).

Each tank is subject to 35 IAC 215.122(b). This rule requires that the tanks be equipped with a permanent submerged loading pipe if the material stored has a vapor pressure greater than 2.5 psia or there is an odor nuisance. The material stored has a vapor pressure less 2.5 psia and there is no odor nuisance, but the tanks are equipped with a permanent submerged loading pipe although not required to be so equipped.

7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected storage tanks not being subject to the New Source Performance Standards (NSPS) for storage tanks, 40 CFR Part 60, Subparts K, Ka or Kb, because the affected storage tanks were constructed prior to the applicable date, do not contain a material specified by the standard (i.e., Subparts K and Ka require the material to be a volatile petroleum liquid and these ink solvents are not petroleum liquids), do not meet the size or vapor pressure requirement specified in the standard, or a combination of the above.
- b. This permit is issued based on the affected rotogravure presses not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected presses are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).
- c. This permit is issued based on the affected storage tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage tanks use a passive control device and do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Control and Operational Requirements

- a. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected presses in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6(e)(1)(i)]
- b.
 - i. Press No. MR-736 shall be equipped with a Permanent Total Enclosure (PTE) that insures 100% capture of the VOM from the ink and solvents used on the printing units [T1]; and
 - ii. VOM emissions from Press No. MR-736 and associated PTE shall be controlled by an activated carbon solvent recovery system that achieves a minimum 98% VOM removal efficiency across the carbon beds based on a monthly average. [T1]
- c. Each publication rotogravure affected source shall limit emissions of organic HAP to no more than eight percent of the total volatile matter used each month. The emission limitation may be achieved by overall control of at least 92 percent of organic HAP used by substitution of non-HAP materials for organic HAP, or by a combination of capture and control technologies and substitution of materials. [40 CFR 63.824(b)]

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected presses are subject to the following:

Emissions from the affected presses shall not exceed the following limits:

<u>Press No.</u>	<u>VOM Emissions</u>		<u>Permit No.</u>
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	
MR-736	9.85	78.8	01070002
MR-737 and MR-738 (Combined)	----	1,585.2	81080017

The limit for Press MR-736 was based on 98% control by the carbon adsorber, a PTE and maximum expected ink usage. The limit for Presses MR-737 and MR-738 was based on 84% overall control efficiency and maximum expected ink usage.

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 month total).

The above limitations were established in the permits listed above, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (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 Prevention of Significant Deterioration (PSD), 40 CFR 52.21 Attachment 6 presents a netting exercise performed when MR-736 was constructed. [T1].

7.2.7 Testing Requirements

- a. Each month the Permittee shall perform a liquid-liquid material balance on the VOM used by the presses using the procedures described in 40 CFR 63.824(b)(1)(i).
- b. Pursuant to Section 39.5(7)(c) of the Act and upon request by the Illinois EPA, the Permittee shall perform one or all of the following tests:
 - i. Control efficiency across the carbon adsorber.
 - ii. Criteria for Verification of a Permanent or Temporary Total Enclosure for Press MB-736 shall be based on the requirements pursuant to the NESHAP 40 CFR 63.827(e)(1) or 40 CFR Part 51, Appendix M, Method 204.
 - iii. The VOM content of inks, thinners, and/or cleaning solvents used in the rotogravure printing operations shall be determined according to USEPA Reference Method 24A of 40 CFR 60 Appendix A, pursuant to 35 IAC 215.409.

7.2.8 Monitoring Requirements

- a. The solvent recovery system shall be equipped with inlet and outlet analyzers that are operated at all times press MR-736 is in operation. The monitoring devices shall be used to monitor the VOM removal efficiency across the carbon beds in order to verify compliance with Condition 7.2.5(b)(ii).

For purposes of compliance with this requirement, operation of Press MR-736 for periods of twelve hours or less when the inlet or outlet analyzers are not operating shall be allowed for purposes of maintenance or repairs to the devices until they are returned to service.

- b. The Permittee shall install, calibrate, maintain and operate, according to the manufacturer's specifications, a device that indicates the cumulative amount of VOM recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within ± 2 percent. [40 CFR 63.824(b)(1)(i)(D)]
- c. After performing an initial compliance test for the PTE on Press No. MR-736, the Permittee shall notify the Illinois EPA of what variable or variables will be monitored to assure that the capture system continues to meet the requirements for a PTE.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected rotogravure presses to demonstrate compliance with Conditions 5.5.1, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Monitoring data required by 40 CFR 63.829(b)(1) and 63.10(b)(2):
 - i. Material usage and composition; and
 - ii. Actions taken during startup, shutdown or malfunction of the carbon adsorber.
- b. Liquid-liquid material balance information. [40 CFR 63.829(c)] (HAP percent lost monthly)
- c. Any information needed to confirm the PTE for MR-736 as required by Condition 7.2.5(b)(i).
- d. VOM emissions in tons and percent to verify compliance with Conditions 7.2.3(c) and 7.2.6. Note that if source emissions were less than 1,500 tons in

the previous year, then a running total is not required to verify compliance with the limit for MR-737 and MR-738.

- e. VOM/HAP emissions from all presses combined (ton/month). The system design includes the small losses from the tanks in the calculation of total loss.
- f. If credit is desired for VOM emissions from materials purchased but not consumed or from waste materials, records of materials disposed of or recycled (both quantity and VOM content) shall be maintained for all inks and solvents on a monthly basis.
- g. Records of the following deviations shall be separately maintained:
 - i. Instances of VOM control efficiency lower than that specified in Condition 7.2.5 as established by procedures in 40 CFR 60.434.
 - ii. Instances of VOM emissions in excess of the limitations specified in Condition 7.2.6.
 - iii. Actions taken during startup, shutdown or malfunction that are inconsistent with the written SSM plan required by Condition 7.2.3(d).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of affected rotogravure presses or their control system with the permit requirements within 30 days of discovery unless a different reporting time is specified below 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. Any actions taken during startup, shutdown or malfunction that are inconsistent with the SSM Plan required by Condition 7.2.3(d) within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with § 63.10(d)(5).
- b. Efficiency of the carbon adsorber not meeting the requirements of Condition 7.2.3(c), (d), or (e) or 7.2.5(b)(ii).
- c. The PTE on Press No. MR-736 is not operating to capture 100% of the VOM generated by the press.
- d. Emissions of VOM exceeding the allowable of Condition 7.2.6.

- e. Any other periodic reporting requirements by the NSPS or NESHAP shall meet the dates specified in Condition 8.6.1.
- f. Operation of Press No. MR-736 for a period of 12 hours or more when the inlet or outlet analyzers on the solvent recovery system are not in operation.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to these presses without prior notification to the Illinois EPA or revision of this permit. Nothing in this condition excuses the Permittee from properly obtaining 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 equipment drives and electrical components, provided that the press web speed does not exceed the design speed specified in the permit application as a result of such upgrades such that emissions will increase above the limits of this permit.
- b. Installation of fume capture (scavengers) devices and enclosures.
- c. Use of low VOM or water based inks or cleaning solvents.
- d. Use of printing related materials with less than 16% VOM content shall be permitted without directing dryer exhaust to the carbon adsorption solvent recovery system provided that monthly and annual VOM emissions comply with Condition 7.2.6.
- e. Use of UV or water-based coatings containing less than 0.10 lb VOM/gal, unless annual emissions exceed 4.4 ton/yr.

7.2.12 Compliance Procedures

- a. Compliance with applicable regulation in Condition 7.2.3 and the emission limits in Condition 7.2.6 shall be based on complying with the operational and control limits in Condition 7.2.5, the material balance required by Condition 7.2.7, the monitoring required by Condition 7.2.8, the recordkeeping requirements in Condition 7.2.9, the reporting requirements in Condition 7.2.10, and the emission factors and formulas specified in Attachment 2.
- b. Under the current situation in which all of the VOM content of the inks is also a HAP, compliance with the requirements of Condition 7.2.3(e) is also considered to be a demonstration of compliance with Condition 7.2.3(c). If the Permittee reformulates so that all of the ink VOM is not a HAP, a separate demonstration of compliance with Condition 7.2.3(c) must be made.

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The Permittee must also make a separate demonstration of compliance with Condition 7.2.3(c) if the method of compliance is changed from complying with 35 IAC 215.401(c) and (d) to 35 IAC 215.40(a) or (b).

7.3 Unit: Roto Cylinder Manufacturing, Dechroming and Washing
Control: Mesh Pads and Carbon Adsorber

7.3.1 Description

The Permittee operates a cylinder manufacturing operation in which the gravure print image is mechanically engraved into copper cylinders. The engraved cylinders are then plated with a layer of chromium in chrome plating tanks. The chrome plating tanks are equipped with mist control devices for the reduction of chromic acid emissions. Other operations that are performed in the cylinder manufacturing area include use of solvent for cylinder cleaning. Cylinder dechroming operations are also included as emission units.

Chromium, a hazardous air pollutant, as defined under Section 112(a) of the Clean Air Act, is emitted from the cylinder chrome plating operation.

Hydrochloric acid is used in the dechrome process but only trace amounts of HCl are emitted.

7.3.2 List of Emission Units and Air Pollution Control Equipment

The following is a listing of the chrome plating equipment.

Emission Unit	Emissions Group Description	Emission Control Equipment
20	Roto Cylinder Manufacturing Chrome Plating Tank No. 1	Baffle Mist Eliminator and Composite Mesh Pad Controls
21	Roto Cylinder Manufacturing Chrome Plating Tank No. 2	Baffle Mist Eliminator and Composite Mesh Pad Controls
22	Roto Cylinder Manufacturing Dechrome System No. 1	None
23	Cylinder Preparation Sinks. Cylinder Finishing Stations. Cylinder Engravers, Grinders & Polishers Solvent Separator Vent. Other Cylinder Work Stations.	None
24	Cylinder Washer	Carbon Adsorber Solvent Recovery System

7.3.3 Applicability Provisions and Applicable Regulations

- a. An “affected cylinder manufacturing operation” for the purpose of these unit-specific conditions, is an operation used for preparation of cylinders that will be used in rotogravure printing and identified in Condition 7.3.2.

- b. The rotogravure cylinder manufacturing, chrome plating systems shall comply with 40 CFR 63 Subpart N. These systems shall be subject to the provisions of the National Emissions Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Both tanks were installed prior to December 16, 1993 and are therefore classified as existing.
- i. The Permittee has chosen to comply with a less stringent emission standard that applies to small hard chromium electroplating facilities. This standard is 0.03 mg/dscm (1.3×10^{-5} gr/dscf). Condition 7.3.5 establishes limits to assure that the source is a small facility. This standard only applies to the tank in which electroplating takes place not associated tanks such as for rinse or for dechrome tanks. This standard applies during startup and shutdown but not during malfunction.
- ii. Operation and Maintenance (O & M) Plan
- The Permittee is required to have a written operation and maintenance plan for the equipment subject to the Subpart N as described in Condition 7.3.3(c) [40 CFR 63.342(f)(3)(i)].
- The operation and maintenance plan at the site and any revision to that plan is incorporated by reference and is enforceable as a term and condition of this permit.
- Revisions to the operation and maintenance plan are automatically incorporated by reference and do not require a permit revision.
- c. The cylinder washer and other solvent uses (Emission Units 23 and 24) are part of the affected facility subject to the NESHAP for publication rotogravure, 40 CFR 63 Subparts A and KK. The elements of those requirements were described in Section 7.2 of this permit. The solvent used in these processes must be included in the monthly liquid-to-liquid material balance used to determine compliance for the rotogravure operation.
- d. The cylinder washing operation is subject to 35 IAC 215 Subpart K. 35 IAC 215.301 states that emissions of VOM may not exceed 8 lb/hr if the VOM is photochemically reactive but 35 IAC 215.302(b) has an alternative standard of 85% control by a carbon adsorber or condenser. The Permittee vents the cylinder washing operation to the same carbon adsorber used by rotogravure presses described in Section 7.2 of this permit.
- e. Emission Unit 23 is also subject to 35 IAC 215.301. Since there is no control equipment, VOM emissions must be under 8 lb/hr or the VOM not be photochemically reactive pursuant to the definition in 35 IAC 211.4690. The 8

lb/hr rate is for each individual piece of equipment within Unit 23 and not all combined.

- f. While as process emissions, all units listed in Condition 7.3.2 are subject to 35 IAC 212, Subpart L, only the chrome plating tanks (emission units 20 and 21) emit PM. Since the process weight rate for these units is less than 100 lb/hr, the allowable PM emissions from these units pursuant to Subpart L is 0.55 lb/hr.

7.3.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected chromium electroplating system not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected chromium electroplating system is subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.3.5 Control and Operational Requirements

- a. The maximum cumulative potential rectifier capacity shall not exceed 60 million amp-hr/yr, calculated as a 12 month rolling period. This limit may be exceeded provided that within 30 days of the exceedance the Permittee intends to no longer operate as a small chromium electroplating facility. See Condition 7.3.10.
- b. The Permittee shall comply with the work practice standards of 40 CFR 63.342(f). These work practice standards must continue to be met during malfunction.
- c. The mist elimination/mesh pad system shall be operated so as to comply with Condition 7.3.3(b)(i).
- d. The capture system and solvent recovery system on the cylinder washing operation shall be operated to reduce VOM emissions by 85%, or non-photochemically reactive solvents shall be used, in order to comply with Condition 7.3.3(d).

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected emission unit(s) are subject to the following:

Emissions from the affected preparation sinks (all combined) shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>

3.0

36.0

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 month total).

The above limitations were established in Permit 81080014, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (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 Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.3.7 Testing Requirements

- a. Upon request the discharge of the control system shall be tested for chromium concentration in order to verify compliance with Condition 7.3.3(b)(i). The test method shall be Method 306 or 306A. The initial compliance test has previously been performed. Note that if the source becomes a large electroplater because the rectifier capacity exceeds 60 million amp-hr/yr, then the system must be tested to demonstrate compliance with the lower emission standard if previous testing has not shown compliance with this standard. This demonstration of compliance must be performed within one year of becoming a large electroplater.
- b. Upon request the capture efficiency for VOM emissions from the cylinder washing operation shall be demonstrated in order to verify that the combination of capture and control comply with the 85% control requirement of Condition 7.3.3(c), if the Permittee is using photochemically reactive solvents in this process. The efficiency of the carbon adsorber demonstrated for the main rotogravure presses may be assumed for these VOM emissions. Alternatively, the Permittee shall demonstrate that the VOM emissions from the cylinder washing operations are less than 8 lb/hr.

7.3.8 Inspection and Monitoring Requirements

- a. The Permittee shall conduct inspections necessary to meet the work practice requirements of Condition 7.3.5.
- b. The following operation and maintenance procedures shall be implemented for the composite mesh pad control systems [40 CFR 63.342(f)]:
 - i. A quarterly visual inspection of composite mesh pad (CMP) system to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the devices.

- ii. A quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
 - iii. A quarterly visual inspection of duct work from the tank(s) to the control device to ensure there are no leaks.
 - iv. Washdown of the composite mesh-pads performed in accordance with manufacturer's recommendations.
- c. Monitoring of the chromium electroplating system consists of daily manual reading of the pressure drop across the composite mesh-pad system. The readings shall be within ± 1 inch of water column of the pressure drop value established during the initial performance test.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected chromium electroplating and cylinder washing operations to demonstrate compliance with Conditions 5.5.1, 7.3.3, 7.3.5, 7.3.6, 7.3.7 and 7.3.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Any records required by the NESHAP as listed in 40 CFR 63.346 or required by 40 CFR 63 Subpart A.
- b. Results of any emission testing performed.
- c. Chromium emissions (lb/mo and lb/yr).
- d. VOM emissions from preparation sinks to confirm compliance with Condition 7.3.6 (lb/mo and ton/yr).
- e. VOM emissions from other equipment in Emission Unit 23 (lb/mo and ton/yr).
- f. VOM emissions from cylinder washing (lb/mo and lb/yr).

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected roto cylinder manufacturing process with the permit requirements within 30 days of discovery unless a shorter reporting time is specified below 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 exceeding the allowable of Conditions 7.3.3(b)(i), 7.3.3(c) or 7.3.6.
- b. If actions taken during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by 40 CFR 63.342(f)(3)(i), the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.342(f)(3)(iv).
- c. Reports not related to deviations.
 - i. The Permittee shall comply with the reporting and notification requirements of 40 CFR 63 Subpart A and 63.346. Note that many of the notifications are related to initial compliance when the rule became effective and those notifications and tests have been completed.
 - ii. Within 30 days of the maximum cumulative potential rectifier capacity exceeding 60 million amp-hr/yr, the Permittee shall notify the Illinois EPA that it intends to comply with the standard for large chromium electroplaters and outline a program for achieving compliance with the lower emission concentration.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected roto cylinder manufacturing process 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. Replacement, upgrading, or automation of cylinder preparation and transport equipment.

- b. Use of alternate etching and plating chemicals and dechroming chemicals.
- c. Replacement of tanks used in the dechrome process and other dechrome system equipment that does not result in an increase in emissions of regulated pollutants.

7.3.12 Compliance Procedures

- a. Compliance with the applicable rules and emission limits in Condition 7.3.6 shall be based on complying with the work practices and standards in Condition 7.3.5, following O & M plan and operational and maintenance plan the monitoring inspection requirements of Condition 7.3.8, the recordkeeping requirements of Condition 7.3.9, the reporting requirements of Condition 7.3.10 and the emission formulas in Attachment 3.
- b. The chrome plating tanks are subject to 35 IAC 212 Subpart L. The chromium emissions allowed by 40 CFR 63 Subpart N are much lower than the allowable of 35 IAC 212 Subpart L, and therefore compliance with Condition 7.3.3(b) shall be deemed compliance with Condition 7.3.3(f).

7.4 Unit Paper Handling System with Cyclones
Control Baghouses

7.4.1 Description

The Permittee operates pneumatic paper collection systems for the collection, transport and recycling and reuse of paper trimmings. The paper trimmings are generated in the pressrooms and binderies, pneumatically conveyed to the by-products area, separated from the carrier air stream by cyclone mechanical separators, and either baled for shipment to a recycler or fired in the waste paper boiler. Entrained dust in the air discharge from one of the cyclones is removed a by baghouse fabric filtration unit.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description ^a	Emission Control Equipment
Paper Handling System		
25	No. C-1	None
26	No. C-3	Baghouse No. 1
27	No. C-5	None
28	No. C-7	None
29	No. C-8	None

^a Cyclones associated with the system are not considered to be control equipment because they recover product, i.e. paper.

7.4.3 Applicability Provisions and Applicable Regulations

- a. An “affected paper handling system” for the purpose of these unit-specific conditions, is a system for moving paper from one area to another employing air as a carrier (pneumatic transfer). These units are described in Condition 7.4.2.
- b. Each affected paper handling system is subject to the emission limits identified in Condition 5.2.2.
- c. Each affected paper handling system is subject to 35 IAC 212.321. This rule limits PM emissions from emission units constructed after April 14, 1972 based upon the process weight rate. The formula for calculating allowable PM emissions is listed in Attachment 7.

7.4.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected paper handling systems not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected paper handling systems do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.4.5 Production Limits and Work Practices

- a. The cyclones and baghouse shall be operated in accordance with the manufacturer's instructions or other good operating practices so that visible emissions comply with Condition 5.2.2(b) and PM emissions comply with Condition 7.4.3(c).
- b. Process weight rates (PWR) of the paper handling systems shall not exceed the following:

	<u>PWR (Tons/Hr)</u>
C-1 and C-5 (each)	1.7
C-7 and C-8 (each)	0.80
C-3	5.0

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected paper handling systems are subject to the following:

Emissions from the affected paper handling systems shall not exceed the following limits:

<u>Unit</u>	<u>PM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
C-1 and C-5 (each)	1.3	14.7
C-7 and C-8 (each)	0.9	9.85
C-3	2.5	26.20

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 month total) [T1].

The above limitations contain revisions to previously issued Permit 72110351. 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 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (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, the hourly emission rate was converted to a monthly rate for ease of recordkeeping. However, compliance with the applicable rule is still based on an hourly emission rate [T1R].

7.4.7 Testing Requirements

Pursuant to Section 39.5(7)(c) of the Act and upon request by the Illinois EPA any or all of the paper handling systems shall be tested for PM emissions to verify compliance with Condition 7.4.3(c) or the opacity read to verify compliance with Condition 5.2.2(b). Standard test methods in 40 CFR 60 Appendix A shall be used in accordance with Condition 8.4.

7.4.8 Inspection Requirements

Once per month a visible emissions observations shall be done on each unit and the baghouse inspected for integrity of the bags.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected paper handling systems to demonstrate compliance with Conditions 5.5.1, 7.4.3, 7.4.6 and 7.4.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and any other visible emission observations;
- b. Process weight rate through each unit;
- c. Annual quantity of paper conveyed through the paper handling systems; and
- d. Emissions of PM (tons/mo and tons/yr), C-1 and C-5, and C-7 and C-8 may be combined, C-3 must be separate in order to determine compliance with Condition 7.4.6.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected paper handling systems with the permit requirements within 30 days of discovery 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 exceeding the allowables of Condition 7.4.3(c) or 7.4.6.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected paper handling system 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 equipment drives and electrical components.
- b. Replacement, upgrading or relocation of bindery equipment which would dictate changes to the waste paper trim collection systems, with no increase in potential emissions of regulated pollutants.
- c. Addition of waste paper trim collection systems designed for additional by-product paper streams, with no increase in potential emissions of regulated pollutants.

7.4.12 Compliance Procedures

Compliance with the applicable requirements in Condition 7.4.3 and the emission limitations in Condition 7.4.6 shall be based on meeting the operational requirements in Condition 7.4.5, the inspection requirements of Condition 7.4.8, the recordkeeping requirements of Condition 7.4.9 and the reporting requirements of Condition 7.4.10. Emissions shall be calculated using the emission factors in Attachment 4.

7.5 Unit: Boilers and Ash Pulverizers
Control: Cyclones and Baghouse

7.5.1 Description

The Permittee operates boilers that utilize natural gas, propane, fuel oil, or paper to generate heat and process steam. Natural gas is the principal fuel utilized by all of the boilers. Propane is available as an alternate stand-by fuel in the event the natural gas supply is interrupted. No. 2 fuel oil is available as an alternative fuel based on economics. One boiler (Boiler No. 6) is also capable of burning paper as an alternative fuel.

A mechanical collector and baghouse filter pollution control system is installed on the exhaust stack of Boiler No. 6 to control particulate emissions when paper is being burned as fuel. An ash pulverizer and handling system on Boiler No. 6 is used if there is a need to produce a ground ash. Particulate emissions from the ash pulverizer and handling system are controlled by a fabric filter dust collector.

Emissions of CO, NO_x, PM, SO₂ and VOM result from the combustion of natural gas, propane, fuel oil, and paper in these boilers.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Emission Unit Description	Emission Control Equipment
30	Boiler No. 1 Gas-Fired with No. 2 Oil Backup Firing Rate: 23.7 mmBtu/hr	None
31	Boiler No. 2 Gas-Fired with No. 2 Oil Backup Firing Rate: 23.7 mmBtu/hr	None
32	Boiler No. 3 Gas-Fired with No. 2 Oil Backup Firing Rate: 23.7 mmBtu/hr	None
33	Boiler No. 4 Gas-Fired with No. 2 Oil Backup Firing Rate: 23.7 mmBtu/hr	None
34	Boiler No. 5 Gas-Fired with No. 2 Oil Backup Firing Rate: 23.7 mmBtu/hr	None
35	Boiler No. 6 Paper-Fired with Gas Supplemental Firing Rate: 27.3 mmBtu/hr	Cyclone, Baghouse No. 4 and Baghouse No. 5
36	Boiler No. 7 Gas-Fired with No. 2 Oil Backup Firing Rate: 33.5 mmBtu/hr	None
37	Ash Pulverizer & Handling System	None (Baghouse No. 3 integral to process)

7.5.3 Applicability Provisions and Applicable Regulations

- a. An “affected boiler” for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.5.1 and 7.5.2.
- b. Each affected boiler is subject to the emission limits identified in Condition 5.2.2.
- c. Boiler No. 7 is subject to the New Source Performance Standard (NSPS) for Small Industrial Commercial Boiler, 40 CFR 60, Subparts Dc; because the affected boiler has a maximum design capacity greater than 10 million Btu/hr and construction commenced after June 9, 1989.
 - i. Pursuant to the NSPS, 40 CFR 60.43c(c) and (d), emission of gases into the atmosphere from the affected boiler, except during periods of startup, malfunction and shutdown, shall not exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
 - ii. Also pursuant to the NSPS, 40 CFR 60.42c(d) specifies that when combusting oil, SO₂ emissions shall not exceed 0.50 lb/mmBtu heat input, or alternatively the boiler shall not combust oil containing greater than 0.5 weight percent sulfur.
- d. The emission of SO₂ into the atmosphere in any one hour period from any affected boiler burning liquid fuel exclusively shall not exceed 0.3 lb SO₂/mmBtu actual heat input sulfur dioxide when distillate fuel oil is burned [35 IAC 214.122(b)(2)].
- e. The emissions of PM into the atmosphere in any one hour period shall not exceed 0.10 lb/mmBtu of actual heat input from any fuel combustion emission unit (any of the affected boilers) using liquid fuel exclusively [35 IAC 212.206].
- f. The ash pulverizer and handling system is subject to 35 IAC 212.321. This rule is written out in Attachment 7. The dust collector is an integral part of the transfer system and not classified as add-on control equipment.
- g. Each of the affected boilers is subject to 35 IAC 216 Subpart B, Fuel Combustion Emission Sources, which provides that emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 million Btu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.5.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected Boiler Nos. 1-6 not being subject to the New Source Performance Standards (NSPS) for small boilers, 40 CFR Part 60, Subpart Dc, because the affected boilers were constructed prior to June 9, 1989.
- b. None of the affected boilers are subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 250 million Btu/hr.
- c. Pursuant to 35 IAC 215.303, none of the affected boilers, i.e., fuel combustion emission units, is subject to 35 IAC 218.301, Use of Organic Material.
- d. There are no applicable requirements for particulate matter, nitrogen oxides or sulfur dioxide for affected boilers firing natural gas or propane.
- e. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard but instead use a passive control measure, such as a low-polluting fuel, that is not considered a control device because it acts to prevent the pollutants from forming.

7.5.5 Control Requirements, Fuel Usages and Firing Rate Limits and Work Practices

- a. The only fuel fired in the affected boilers No. 1-5 and 7 shall be natural gas, propane and distillate fuel oil. In addition, Boiler No. 6 may burn paper as a fuel. Organic liquid by-products or waste material shall not be used in the affected boiler.
- b. The Permittee shall not keep, store, or use distillate fuel oil for any of the affected boilers with sulfur content greater than the larger of the following two values pursuant to 35 IAC 214.122.
 - i. 0.28 weight percent, or
 - ii. The wt. percent given by the formula:
$$\text{Maximum Wt. percent sulfur} = (0.000015) \times (\text{Gross heating value of oil, Btu/lb}).$$
- c.
 - i. The maximum firing of affected Boiler No. 7 shall not exceed 33.5 million Btu/hour. [T1]
 - ii. The use of distillate fuel oil in Boiler No. 7 shall not exceed 0.24 million gallons per month and 1.92 million gallons per year. [T1]

- d. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected boiler, in a manner consistent with good air pollution control practice for minimizing emissions.
- e. Although not control equipment, the dust collector on the ash handling system shall be operated to meet the limits in Condition 7.5.3(f) and 7.5.6(b).

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, affected Boiler No. 7 is subject to the following:

- a. Emissions from the affected Boiler No. 7 shall not exceed the following limits. These limits represent the maximum hourly emission of the boiler as stated in the application, which reflect operation with fuel oil for SO₂ and NO_x and natural gas for CO and VOM.

<u>Pollutants</u>		<u>Emissions</u>	
		<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Carbon Monoxide	(CO)	1.2	12.33
Nitrogen Oxides	(NO _x)	2.1	20.63
Volatile Organic Material	(VOM)	0.8	0.81
Sulfur Dioxide	(SO ₂)	3.9	38.72

The annual limits address emissions using the maximum allowable quantity of distillate fuel oil as stated in Condition 7.5.5(c)(ii), with the remaining fuel being natural gas, at the maximum boiler firing rate for 8,760 hours per year. 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 month total).

The above limitations contain revisions to previously issued Permit 01070002. 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 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (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, the hourly rates have been replaced by monthly rates for ease of recordkeeping [T1R].

- b. Emissions from the affected ash pulverizer and handling system shall not exceed the following limit:

PM Emissions
(Ton/Year)

17.1

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

The above limitation was established in Permit 85060046, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (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 Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.5.7 Testing Requirements

In place of testing of the fuel oil for sulfur content to determine compliance with Condition 7.5.3(c)(ii), the Permittee may receive a certification from the fuel supplier as allowed by 40 CFR 60.42c(h). This certification is also acceptable for demonstrating compliance with Condition 7.5.5(b).

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

a. In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Boiler No. 7 or all boilers to demonstrate compliance with Conditions 5.5.1, 7.5.5, 7.5.6 and 7.5.7, pursuant to Section 39.5(7)(b) of the Act:

- i. Fuel oil weight percent sulfur and supplier certifications (each shipment);
- ii. Emissions of NO_x, CO, SO₂, and VOM (tons/mo and tons/yr). Data for Boiler No. 7 must be unit specific but the other boilers may be aggregated;
- iii. Use of distillate oil used for the affected boilers with Boiler No. 7 separated (gal/mo); and

- iv. Total natural gas usage for the affected boilers with Boiler No. 7 separated.
- b. Pursuant to the NSPS, 40 CFR 60.43c(g) and (e), the Permittee shall maintain records of the following items for the affected Boiler No. 7:
 - i. Usage of natural gas for the boiler (ft³/day);
 - ii. Usage of oil for the boiler (gal/day); and
 - iii. The following information for the quarterly reports required by the NSPS:
 - A. Calendar dates in the reporting period;
 - B. Each 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any non-compliance with the emission standard; and a description of the actions taken; and
 - C. Documentation of fuel oil sulfur content consisting of either:
 - 1. Copies of fuel oil supplier certifications, including: the name of the oil supplier; and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil found at 40 CFR 60.41c; or
 - 2. Records of fuel oil analysis conducted per the requirements of 40 CFR 60.46c(d)(2).

7.5.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected boiler with the permit requirements within 30 days of discovery 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:
 - i. Use of fuel oil that did not meet the requirements of Condition 7.5.5(b);
 - ii. Fuel oil usage exceeding the usage specified in Condition 7.5.5(c)(ii);

- iii. Emissions exceeding the limits in Condition 7.5.6; and
 - iv. Exceedance of the opacity limits of Condition 7.5.3(c)(i).
- b. The Permittee shall submit quarterly reports to the Illinois EPA. Each quarterly report shall be postmarked by the 30th day following the end of the reporting period. The reports shall contain the information in Condition 7.5.9(b)(i) – (iii). If fuel supplier certification is used to demonstrate compliance, in addition to the fuel supplier certification required in Condition 7.5.9(b)(iii)(C)(1), the quarterly reports shall include a certified statement signed by the Permittee that the records of fuel supplier certifications submitted represent all of the fuel consumed during the quarter. [40 CFR 60.48c(e)]

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected boiler 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. Replacement or upgrading of fuel burners without increase in heat capacity.
- b. Modifications to cyclone collectors and baghouse fabric filters to improve cleaning efficiency.
- c. Use of natural gas, propane, fuel oil or paper for fuel, as described in the permit application provided that the use of fuel oil in Boiler No. 7 does not exceed the allowable of Condition 7.5.5(c)(ii).
- d. Upgrades of equipment drives and electrical components.

7.5.12 Compliance Procedures

- a. Compliance with the applicable rules and emission limits shall be based on meeting the fuel limits in Condition 7.5.5, the recordkeeping requirements of Condition 7.5.9 and the reporting requirements of Condition 7.5.10.
- b. Emission factors to be used in calculating emissions are in Attachment 5.

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 _____ {insert public notice start date} (the date of issuance of the draft permit) 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].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

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. 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 Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the

required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [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 determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which 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. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
 - iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)

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P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

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

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

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 [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- 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, 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, 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 such malfunction or breakdown is allowed by a permit condition [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 thereunder.

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, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- 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
 - 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. As 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 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, Compliance 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 Section, 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 [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment 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:
 - 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. Normally, an act of God such as lightning or flood is considered an emergency;
 - 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.

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, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, 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 inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

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 under Section 39.5(15)(b) 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, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. 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

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The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1: Calculations for Lithographic Printing Equipment

- a. To determine compliance with Condition 7.1.6, emissions from the affected presses shall be calculated based on the following:

Ink VOM Consumption (C_I):

$$C_I = M_I W_I / 100$$

Fountain Solution VOM Consumption (C_F):

$$C_F = V_F P_F$$

Manual Blanket Wash VOM Consumption (C_M):

$$C_M = V_M P_M$$

Automatic Blanket Wash VOM Consumption (C_A):

$$C_A = V_A P_A$$

Ink VOM Emissions (E_I)

$$E_I = C_I (1 - R_I / 100) [1 - K / 100] (J_I / 100)$$

Fountain Solution VOM Emissions (E_F):

$$E_F = C_F [1 - (K / 100)] (J_F / 100)$$

Automatic Cleaning Solvent VOM Emissions (E_A):

$$E_A = C_A [1 - (K / 100)] (J_A / 100)$$

Manual Cleaning Solvent VOM Emissions (E_M):

$$E_M = C_M (1 - R_M / 100)$$

Total VOM Emissions (E_T):

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

Where:

M_I = Weight of ink used (amount supplied to press minus amount discarded or recycled) (pounds)

W_I = Weight percent VOM in ink (wt. %)

V_F = Volume of fountain solution additive used (amount supplied to press minus amount discarded or recycled) (gallons)

P_F = Pounds VOM per gallon of fountain solution additive (pounds/gallon)

V_M	=	Volume of manual cleaning solvent used (amount supplied to press minus amount discarded or recycled) (gallons)
P_M	=	Pounds VOM per gallon of manual cleaning solvent (pounds/gallon)
V_A	=	Volume of automatic cleaning solvent used (amount supplied to press minus amount discarded or recycled) (gallons)
P_A	=	Pounds VOM per gallon of automatic cleaning solvent (pounds/gallon)
C_I	=	Ink VOM Consumption (pounds)
C_F	=	Fountain Solution VOM Consumption (pounds)
C_A	=	Automatic Cleaning Solvent VOM Consumption (pounds)
C_M	=	Manual Cleaning Solvent VOM Consumption (pounds)
R_I	=	Percent of Manual Cleaning Solvent VOM retained in wipers (50%) ^b
K	=	Control efficiency of RTOs (as demonstrated during testing pursuant to Condition 7.1.5(a) ^c
J_I	=	Capture Efficiency of Dryer and Control System for Ink VOM (100%)
J_F	=	Capture Efficiency of Dryer and Control System for Fountain Solution (70%) ^b
J_A	=	Capture Efficiency of Dryer and Control System for Automatic Cleaning Solvent VOM (40%) ^d

References for the values stated are as follows:

^a USEPA Guideline Series: Control of Volatile Organic Emissions from Offset Lithographic Printing (Draft, September 1993). For fountain solutions to use 70%, the additives must be low volatility materials such as ethylene glycol, glycol ethers or other low-volatility compounds. Ethylene glycol and glycol ethers are both HAPs. If alcohol is used as the additives, the capture efficiency is 50% as presented.

^b USEPA Alternative Control Techniques Document: Offset Lithographic Printing (EPA 453/R-94-054, June 1994), given the operating practices required by Condition 7.1.5 are followed.

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- c Until testing is performed, the efficiency shall be presumed to be 97%, which is the level of control underlying Condition 7.1.6(a).
- d For purpose of compliance with these limits calculation of VOM emissions from automatic blanket wash may presume 40% capture of blanket wash VOM in the press dryers, as stated in USEPA's Alternative Control Techniques Document: Offset Lithographic Printing (EPA 453/R-94-054, June 1994).

10.2 Attachment 2: Calculations for Rotogravure Printing Equipment

- a. Compliance with the VOM emission limit in Condition 7.2.6 for the affected press MR-736 shall be calculated based on the following:

Ink VOM Consumption (C_I):

$$C_I = M_I W_I / 100$$

Diluent/Cleaning Solvent VOM Consumption (C_S):

$$C_S = V_S P_S$$

Total VOM Consumption:

$$C_T = C_I + C_S$$

Total VOM Emissions (E_T):

$$E_T = C_T [1 - K/100] (J/100)$$

Where:

- M_I = Weight of ink used (amount supplied to press minus amount discarded or recycled) (pounds)
- W_I = Weight percent VOM in ink (wt. %)
- V_S = Volume of diluent and cleaning solvent used (amount supplied to press minus amount discarded or recycled) (gallons)
- P_S = Pounds VOM per gallon of diluent and cleaning solvent (pounds/gallon)
- K = Control efficiency of carbon adsorbers system (monthly average as determined by monitoring pursuant to Condition 7.2.8)
- J = Capture Efficiency of Permanent Total Enclosure Capture System for VOM (100% as demonstrated pursuant to Condition 7.2.5(b)(i))

- b. Compliance with Condition 7.2.3(c) and (d) shall be based on total emissions from all presses to total consumption.
- c. Compliance with Condition 7.2.3(e) shall be based on total HAP emissions to total VOM consumed in the system as described in 40 CFR 63.824.

10.3 Attachment 3: Calculations for Roto Cylinder Manufacturing, Dechroming and Washing

a. Chromium Emissions from Plating Tanks

Cr Emissions (lb/hr) = Demonstrated NESHAP standard of 1.3×10^{-5} gr/dscf times airflow from the plating tank during most recent compliance test and use of standard conversion factors for proper units.

b. VOM Emissions from Cylinder Washer

VOM Emissions (lb/mo) = Solvent usage (gal/mo) times solvent density (lb/gal) times [1 – capture efficiency (%/100) times mass balance solvent recovery efficiency (%/100)]

Capture efficiency = 99%

Mass balance solvent recovery efficiency = most recent monthly value.

c. VOM Emissions from Preparation Sinks

VOM Emissions (lb/mo) = Solvent usage (gal/mo) times solvent density (lb/gal) times [1 – capture efficiency (%/100) times mass balance solvent recovery efficiency (%/100)]

Capture efficiency = 50%

Mass balance solvent recovery efficiency = most recent monthly value.

10.4 Attachment 4: Emissions Calculations – Pneumatic Paper Collection System

Emissions of PM from the pneumatic paper collection system shall be based on the following standard emission factors and formula:

Cyclone Emission Factor (lb/ton)	Fabric Filtration System Emission Factor (lb/ton)
1	0.015

Where:

PM emissions (lb) = [By-Products Paper Processed through Uncontrolled Cyclones (tons) x Emission Factor (lb/ton)] + [By-Products Paper Processed Through Cyclones Controlled with Fabric Filtration Systems (tons) x Emission Factor (lb/ton)]

10.5 Attachment 5: Emissions Calculations - Boilers

Emissions from the boilers shall be based on the following standard emission factors^{1,2,3} and formulas:

<u>Pollutant</u>	<u>Waste Paper Emission Factor (lb/ton)</u>	<u>Distillate Fuel Oil Emission Factor (lb/10³ gal)</u>	<u>Natural Gas Emission Factor (lb/10⁶ ft³)</u>	<u>Propane Emission Factor (lb/1,000 gal)</u>	<u>Ash Handling Emission Factor (lb/ton)</u>
CO	4.0	5	35.0	3.2	--
NO _x	0.68	20	140.0	19.0	--
PM	0.6 ⁴	2	13.7	0.6	0.1
SO ₂	0.15	40 ⁵	0.6	0.1 ⁹	--
VOM	1.4	0.2	2.78	0.5	--

$$\text{Boiler Pollutant Emissions (lb)} = [\text{Waste Paper Consumption (tons)} \times \text{Emission Factor (lb/ton)}] \\
+ [\text{Fuel Oil Consumption (10}^3 \text{ gal)} \times \text{Emission Factor (lb/10}^3 \text{ gal)}] + \\
[\text{Natural Gas Consumption (10}^6 \text{ ft}^3) \times \text{Emission Factor (lb/10}^6 \text{ ft}^3)] + \\
[\text{Propane Consumption (1,000 gal)} \times \text{Emission Factor (lb/1,000 gal)}]$$

$$\text{Ash Handling PM Emission} = \text{Ash Handled (tons)} \times \text{Emission Factor (lb/ton)}$$

- ¹ AP-42 emission factors for CO, NO_x, SO₂, and nonmethane TOC from wood waste combustion. Tables 1.6-2 and 1.6-3, AP-42, 4th Edition.
- ² AP-42 emission factors for CO, NO_x, total particulate matter, combined SO₂, and SO₃, and nonmethane TOC from uncontrolled distillate combustion in industrial boilers, Tables 1.3-2, 1.3-4, and 1.3-4, AP-42, Volume I, Supplement F, July 1993.
- ³ AP-42 emission factors for CO, NO_x, total particulate matter, SO₂, and VOM uncontrolled natural gas combustion in commercial boiler (10-100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1/4-3, AP-42, Volume I, Supplement F, July 1993. VOM emission factor based on TOC factor corrected for 52% methane contribution.
- ⁴ Emission factor for total particulate matter based on 0.055 lb PM/mmBtu and a nominal heating value for paper⁴ of 6,000 Btu/lb.
- ⁵ Derived from the applicable AP-42 emission factor of 142S from uncontrolled distillate oil combustion in industrial boilers (Table 1.3-2, AP-42, Volume I, Supplement F, July 1993). Based on maximum sulfur content of 0.28%. Alternatively, actual sulfur content may be used to calculate emissions based on the emission factor of 142S, where S equals weight percent sulfur.
- ⁶ Based on AP-42 factor of 0.10S and assumed average sulfur content of 1 gr/100 ft³ gas vapor.

10.6 Attachment 6 – Netting for 2001 Construction Project

a. Attainment PSD Applicability for Volatile Organic Material (VOM)

Table I – Emissions Increases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Proposed Commencement of Operation Date</u>	<u>VOM Emissions (Tons/Year)</u>	<u>Permit Number</u>
Press MM-718	2001	37.5	01070002
Press MR-736	2001	78.8	01070002
Boiler #7	2001	0.81	01070002

Table II – Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Commencement of Operation Date</u>	<u>VOM Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Press MM-721	1999	37.7	99070077
Press MM-717	1998	36.6	97120012

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Commencement of Change Date</u>	<u>VOM Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Press MM-711 (Shutdown)	2000	-49.2	81080021
Press MM-710*	2001	-48.1	81080022
Press MM-714*	2001	-69.8	84100027

Table IV – Overall Emissions Increase

	<u>(Tons/Year)</u>
Increases Associated With The Proposed Modification	117.11
Contemporaneous Emission Increases	74.30
Contemporaneous Emission Decrease	<u>-167.10</u>
Total Net Change	24.31

* Decrease in existing press, which was previously uncontrolled and for the purpose of this project will be controlled by the new thermal oxidizer system with a control efficiency of 97%.

b. Attainment PSD Applicability for Sulfur Dioxide (SO₂)

Table I – Emissions Increases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Fuel</u>	<u>Proposed Commencement of Operation Date</u>	<u>SO₂ Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Press MM-718 Dryer	Natural Gas	2001	0.013	01070002
Thermal Oxidizer	Natural Gas	2001	0.009	01070002
Boiler #7	Oil and/or Natural Gas	2001	38.72	01070002

Table II – Overall Emissions Increase

	<u>(Tons/Year)</u>
Increases Associated With The Proposed Modification	38.73

10.7 Attachment 7 Allowable Emissions of PM Based on Process Weight Rate

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 and modification commenced after April 14, 1972, at a source or premises, exceeds the allowable emissions rates specified in subsection (b) of 35 IAC 212.321 [35 IAC 212.321(b)].

The emissions of particulate matter into the atmosphere in any one hour period from each of the affected rack cleaners shall not exceed the allowable emission rates specified in the following equation:

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

Where:

P = Process weight rate; and

E = Allowable emission rate; and

- a. For process weight rates up to 27.2 MG/hr (450 ton/hr):

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

[35 IAC 212.321]

- b. For process weight rates under 100 lb/hr, the allowable is 0.55 lb/hr. (35 IAC 266.110)

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10.8 Attachment 8 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: _____

10.9 Attachment 9 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
 - Do not violate any applicable requirement;
 - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
 - Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

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An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Illinois EPA is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	_____
_____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____ / _____ / _____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.11 Attachment 11 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

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- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

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

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

The Mattoon Manufacturing Division of R. R. Donnelley & Sons Company is located 2.5 miles north of Mattoon, Illinois, on U.S. Route 45. The source produces magazines and catalogs using heatset web offset lithographic and rotogravure printing presses. Other related process equipment located at this source includes pneumatic paper handling system, ink and solvent storage tanks, and fuel combustion devices (boilers).

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Emission Unit Description	Emission Control Equipment
1	Offset Press MM-710	None
2	Offset Press MM-712	None
3	Offset Press MM-714	Tandem RTO System
4	Offset Press MM-715	Tandem RTO System
5	Offset Press MM-716	Tandem RTO System
6	Offset Press MM-717	Tandem RTO System
7	Offset Press MM-719	Tandem RTO System
8	Offset Press MM-721	Tandem RTO System
9	Offset Press MM-723	Tandem RTO System
10	Gravure Press MR-728	Carbon Bed Adsorber Solvent Recovery System
11	Gravure Press MR-729	Carbon Bed Adsorber Solvent Recovery System
12	Gravure Press MR-730	Carbon Bed Adsorber Solvent Recovery System
13	Gravure Press MR-731	Carbon Bed Adsorber Solvent Recovery System
14	Gravure Press MR-732	Carbon Bed Adsorber Solvent Recovery System
15	Gravure Press MR-733	Carbon Bed Adsorber Solvent Recovery System
16	Gravure Press MR-736	Carbon Bed Adsorber Solvent Recovery System
17	Gravure Press MR-737	Carbon Bed Adsorber Solvent Recovery System
18	Gravure Press MR-738	Carbon Bed Adsorber Solvent Recovery System

Emission Unit	Emission Unit Description	Emission Control Equipment
19 Gravure Tanks as Follows:		
19a	Gravure Tank TF-1 10,000 Gal	SLP ^a
19b	Gravure Tank TF-2 10,000 Gal	SLP
19c	Gravure Tank TF-3 8,000 Gal	SLP
19d	Gravure Tank TF-4 8,000 Gal	SLP
19e	Gravure Tank TF-5 10,000 Gal	SLP
19f	Gravure Tank TF-6 8,000 Gal	SLP
19g	Gravure Tank TF-7 8,000 Gal	SLP
19h	Gravure Tank TF-8 8,000 Gal	SLP
19i	Gravure Tank TF-9 10,000 Gal	SLP
19j	Gravure Tank TF-10 8,000 Gal	SLP
19k	Gravure Tank TF-11 8,000 Gal	SLP
19l	Gravure Tank TF-12 8,000 Gal	SLP
19m	Gravure Tank TF-13 25,000 Gal	SLP
19n	Gravure Tank TF-14 25,000 Gal	SLP
19o	Gravure Tank TF-15 650 Gal	SLP
19p	Gravure Tank TF-16 8,000 Gal	SLP
20	Rotogravure Cylinder Manufacturing Chrome Plating Tank No. 1	Composite Mesh Pads and HEPA Filter
21	Rotogravure Cylinder Manufacturing Chrome Plating Tank No. 2	Composite Mesh Pads and HEPA Filter
22	Rotogravure Cylinder Manufacturing Dechrome System No. 1	None
23	Rotogravure Cylinder Manufacturing Preparation Sinks and Solvent Use	None
24	Cylinder Washer	Carbon Adsorber Solvent Recovery System
Paper Collection System as Follows:		
25	Paper Collection System No. 1	None
26	Paper Collection System No. 3	Baghouse No. 1
27	Paper Collection System No. 5	None
28	Paper Collection System No. 7	None
29	Paper Collection System No. 8	None
Boilers as Follows:		
30	Boiler No. 1 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
31	Boiler No. 2 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
32	Boiler No. 3 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
33	Boiler No. 4 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
34	Boiler No. 5 Gas-Fired with No. 2 Oil Backup 23.7 mmBtu/hr	None
35	Boiler No. 6 Paper, Gas and Oil-Fired, 27.3 mmBtu/hr	Cyclone & Baghouse No. 4 Baghouse No. 5
36	Boiler No. 7, Gas-Fired with No. 2 Oil Backup, 33.5 mmBtu/Hr	None

Emission Unit	Emission Unit Description	Emission Control Equipment
37	Ash Pulverizer and Handling System	None (Baghouse No.3 integral to process)

^a Submerged Loading Pipe

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	3,137.8
Sulfur Dioxide (SO ₂)	61.37
Particulate Matter (PM)	126.9
Nitrogen Oxides (NO _x)	66.5
Total	3,398.77

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.