

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE:

International Paper Foodservice Business  
Attn: Jesse Trent, Environmental Coordinator  
500 Dacey Drive  
Shelbyville, Illinois 62565

I.D. No.: 173030AAP  
Application No.: 04090011

Date Received: September 3, 2004  
Date Issued: TO BE DETERMINED  
Expiration Date<sup>1</sup>: TO BE DETERMINED

Operation of: Paperware Manufacturing Plant  
Source Location: 500 Dacey Drive, Shelbyville, Shelby County, 62565  
Responsible Official: Robert Eades, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a paperware manufacturing 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 Jonathan Sperry at 217/782-2113.

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

DES:JS:jar

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

<sup>1</sup> This permit contains terms and conditions that address the applicability, and, if determined applicable, substantive requirements of Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. The authority for these provisions is found in these regulations and in the general authority provided to the Illinois EPA by Section 9.1 of the Environmental Protection Act (Act) and Sections 39(a) and 39.5(7) (a) of the Act, which authorize the Illinois EPA to include conditions in permits that are required to accomplish the purposes of the Act. Any such terms and conditions are specifically identified within this permit as T1 conditions. These terms and conditions continue in effect as provided by Condition 8.7 of this permit, notwithstanding the expiration date specified above, as their authority derives from Title I, as well as from Title V of the CAA.

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**1.0 SOURCE IDENTIFICATION**

1.1 Source

International Paper Foodservice Business  
500 Dacey Drive  
Shelbyville, Illinois 62565  
217/774-2176

I.D. No.: 173030AAP  
County: Shelby  
Standard Industrial Classification: 2671, Paper Coating and Glazing

1.2 Owner/Parent Company

International Paper Company  
400 Atlantic Street  
Stamford, Connecticut 06921

1.3 Operator

International Paper Foodservice Business  
500 Dacey Drive  
Shelbyville, Illinois 62565

Jesse Trent, Environmental Coordinator  
217/774-2176, Ext. 216

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
I.D. No.	Identification Number of Source, assigned by Illinois EPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
kW-hr	kilowatt-hour
L	liter
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
mmscf	million standard cubic feet
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
O <sub>3</sub>	Ozone
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PS	polystyrene
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit

T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
UV	ultraviolet
VOM	Volatile Organic Material

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

Portable and Stationary Welders

- 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:

Shredder/Baler

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

- a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].
- b. Storage tanks of 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)].
- c. Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

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

#### 3.2 Compliance with Applicable Requirements

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

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 215.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
B-1	Boiler (20.9 mmBtu/hr)	Jan. 1974	None
H-1, H-2, H-3	Space Heaters (3 at 5.0 mmBtu/hr)	April 1996	None
S-1 through S-10	Storage Silos	1992-2001	Silo Filters (SF-1 through SF-10)
PE-1, FT-1, FT-2	Paper/Plastic Extruder with Flame Treaters (2 at 1.6 mmBtu/hr)	Feb. 1988	None
COR-1, COR-2	Corona Arc Treaters	Nov. 2002 and Dec. 2003	Ozone Decomposition Units (OZONE-1, OZONE-2)
FP-1 through FP-7	Flexographic Printing Presses with Dryers (8.28 mmBtu/hr Total)	1974-1998	None
PM-1	Plate Maker	Oct. 2000	None
TUB-1	7 Tub Gluing Lines	Jan. 1987	None
LAM-1	Laminator	Jan. 1991	None
SHRED-1, BAL-1, BAL-2	Waste Paper Collection System Shredder and Balers	2002 (Cyclones C-3 and C-4: 1985)	Cyclones C-1 through C-4
PS-1 through PS-15, PS-18 through PS-22, Cono-Clip Line, Cup Line	22 Polystyrene Extrusion Machines	1979-1987 (PS-21: 2000, Cup Line: 2001, PS-22: 2004)	Electrostatic Precipitator
GR-1 through GR-29	Polystyrene Grinders	1979-2004	Bag Filters (BF-1 through BF-29)
UV-1, UV-2, UV-3	UV Offset Printing Presses	Jan. 2001 and Nov. 2001	None

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

5.1.1 The source manufactures paper cups and tubs and polystyrene cups and lids. In addition, the source operates a boiler and heaters to provide steam and comfort heating.

5.1.2 This source is located in an area that is in attainment of the National Ambient Air Quality Standards for all pollutants.

### 5.2 Major Source Status

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

5.2.2 This permit is also issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, pursuant to 40 CFR 70.3(a)(3) [Section 39.5(2)(a)(ii) of the Act]. Specifically, this source is subject to 40 CFR 63, Subpart JJJJ, Paper and Other Web Coatings.

### 5.3 Source-Wide Applicable Provisions and Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
- c. Pursuant to 35 IAC 237.102, no person shall cause or allow open burning, except the Illinois EPA may grant permits for open burning in accordance with 35 IAC 237.201.

### 5.3.3 Ozone Depleting Substances

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

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

### 5.3.4 Risk Management Plan (RMP)

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

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

### 5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. 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 regulations under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B that were promulgated after the date issued of this permit.

- c. This stationary source could be subject to 40 CFR Part 63, Subpart JJJJ, Paper and Other Web Coatings. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8 beginning in the year that compliance is required under a final and effective rule. This permit may also have to be revised or reopened to address this new regulation (see Condition 9.12.2).

#### 5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

#### 5.4 Source-Wide Non-Applicability of Regulations of Concern

Source-wide non-applicability of regulations of concern are not set for this source. However, there may be unit specific non-applicability of regulations of concern set forth in Section 7 of this permit.

#### 5.5 Source-Wide Control Requirements and Work Practices

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

#### 5.6 Source-Wide Production and Emission Limitations

##### 5.6.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	89.71
Sulfur Dioxide (SO <sub>2</sub> )	0.12
Particulate Matter (PM)	64.20
Nitrogen Oxides (NO <sub>x</sub> )	20.75
Ozone and HAP, not included in VOM or PM	9.59
Total	184.37

5.6.2 Emissions of Hazardous Air Pollutants

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

5.6.3 Other Source-Wide Emission Limitations

The emissions of HAPs from the Cup Line (Section 7.8) and the UV offset printing presses UV-1 and UV-2 (Section 7.6) shall not exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs. These limitations were established in Permit 01060025. These limits ensure that Cup Line and the UV offset printing presses are not subject to the requirements of Section 112(g) of the Clean Air Act.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois

EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].

- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.8 Source-Wide Monitoring Requirements

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

#### 5.9 Source-Wide Recordkeeping Requirements

##### 5.9.1 Annual Emission Records

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

##### 5.9.2 Records for HAP Emissions

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

##### 5.9.3 Retention and Availability of Records

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

## 5.10 Source-Wide Reporting Requirements

### 5.10.1 Source-Wide Reporting Requirements

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

### 5.10.2 Annual Emissions Report

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

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

Source-wide operational flexibility is not set for this source. However, there may be provisions for unit specific operational flexibility set forth in Section 7 of this permit.

## 5.12 Source-Wide Compliance Procedures

### 5.12.1 Procedures for Calculating Emissions

- a. Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be based on the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.
- b. For the purpose of estimating fugitive PM emissions from parking lots at the source, the emission factors and procedures in Section 13.2 of AP-42 are acceptable.

## **6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS**

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

## 7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

### 7.1 Boiler and Space Heaters

#### 7.1.1 Description

A natural gas-fired boiler is used to produce steam and comfort heat. The boiler has a maximum heat input of 20.9 mmBtu/hr. Natural gas-fired space heaters also provide comfort heating. The maximum heat input of each heater is 5.0 mmBtu/hr. Emissions of all criteria pollutants results from the combustion of natural gas.

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
B-1	Boiler (20.9 mmBtu/hr)	Jan. 1974	None
H-1, H-2, H-3	Space Heaters (3 at 5.0 mmBtu/hr)	April 1996	None

#### 7.1.3 Applicable Provisions and Regulations

- a. The "affected fuel combustion units" for the purpose of these unit-specific conditions, are boilers and space heaters used to provide steam and heat, as described in Conditions 7.1.1 and 7.1.2.
- b. The boiler is subject to 35 IAC 216.121, which states that the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- c. The boiler is subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. However, pursuant to 40 CFR 63.7506(b), the Permittee is only required to complete the initial notification requirement in 40 CFR 63.9 for an existing large gaseous fuel unit.

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

- a. The space heaters are not subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc, because the space heaters each have a maximum design heat input capacity less than 2.9 MW (10 mmBtu/hr).
- b. Pursuant to 35 IAC 215.303, each affected fuel combustion unit is not subject to 35 IAC 215.301, Use of Organic Material.

- c. The space heaters are not subject to 35 IAC 216.121 for CO emissions, because each space heater has an actual heat input less than 2.9 MW (10 mmBtu/hr).
- d. The affected fuel combustion units are not subject to 35 IAC 217.121 for NO<sub>x</sub> emissions, because each affected fuel combustion units has an actual heat input less than 73.2 MW (250 mmBtu/hr).
- e. The space heaters are not subject to 40 CFR Part 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, because the space heaters are small, gaseous fuel units [40 CFR 63.7506(c)].
- f. The affected fuel combustion units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected fuel combustion units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements and Work Practices

Control requirements are not set for the affected fuel combustion units. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

7.1.6 Production and Emission Limitations

Production and emission limitations are not set for the affected fuel combustion units. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.1.7 Testing Requirements

Testing requirements are not set for the affected fuel combustion units. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.1.8 Monitoring Requirements

Monitoring requirements are not set for the affected fuel combustion units. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected fuel combustion units to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7) (b) of the Act:

- a. Monthly and annual natural gas usage (ft<sup>3</sup>/month and ft<sup>3</sup>/year);
- b. Heat content of natural gas (Btu/ft<sup>3</sup>); and
- c. Annual aggregate NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM emissions from each affected fuel combustion unit, based on fuel consumption and the applicable emission factors, with supporting calculations.

#### 7.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected fuel combustion units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits of Condition 5.6.1 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected fuel combustion units. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

#### 7.1.12 Compliance Procedures

- a. Compliance with the CO emission limitation of Condition 7.1.3(b) is addressed by the fuel records required in Condition 7.1.9. Further compliance procedures are not set for CO by this permit as the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, for uncontrolled CO emissions from a gas-fired boiler, indicates compliance with the applicable limitation.
- b. Compliance with the emission limits in Condition 5.6 are addressed by the records required in Condition 7.1.9 and the emission factors and formulas listed below:
  - i. Emission factors for natural gas combustion:

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

The emission factors (lb/mmscf) are for Natural Gas-Fired Small Boilers (<100 mmBtu/hr Heat Input) from AP-42 Section 1.4, Tables 1.4-1 and 1.4-2 (March 1998).

- ii. Emission formula for the affected fuel combustion units when fired by natural gas:

(Emissions, lb) = (The Appropriate Emission Factor, lb/mmscf) x (Natural Gas Usage, mmscf)

## 7.2 PM Emission Units

### 7.2.1 Description

Plastic and polystyrene resin pellets are unloaded and stored in storage silos. Resin pellets are pneumatically loaded from railcar to the top of the storage silos. PM and PM<sub>10</sub> emissions from each storage silo are controlled by silo filters.

In the paper cups and tub process, waste paper from the blanking operations are collected, shredded, and baled at the waste paper collection system (712 Building). These processes include two balers, one shredder, and four cyclones. PM emissions from the cyclones are exhausted outside the building.

In the polystyrene cups and lids process, scrap polystyrene from extruded polystyrene sheets may be grinded at one or more of the polystyrene grinders and returned to the extrusion process. PM and PM<sub>10</sub> emissions from each grinder are controlled by bag filters which vent inside the building..

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
S-1 through S-10	Storage Silos	1992-2001	Silo Filters (SF-1 through SF-10)
SHRED-1, BAL-1, BAL-2	Waste Paper Collection System Shredder and Balers	2002 (Cyclones C-3 and C-4: 1985)	Cyclones C-1 through C-4
GR-1 through GR-29	Polystyrene Grinders	1979-2004	Bag Filters (BF-1 through BF-29)

### 7.2.3 Applicable Provisions and Regulations

- a. The "affected PM emission units" for the purpose of these unit-specific conditions, are emission units which emit PM and are controlled by a filter or cyclone, as described in Conditions 7.2.1 and 7.2.2.
- b. The affected PM emission units are subject to 35 IAC 212.321(b), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(a)].

7.2.4 Non-Applicability of Regulations of Concern

Non-applicability of regulations of concern are not set for the affected PM emission units. However, there may be source-wide non-applicability of regulations of concern set forth in Condition 5.4.

7.2.5 Control Requirements and Work Practices

Control requirements are not set for the affected PM emission units. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

7.2.6 Production and Emission Limitations

Production and emission limitations are not set for the affected PM emission units. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.2.7 Testing Requirements

Testing requirements are not set for the affected PM emission units. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.2.8 Monitoring Requirements

a. Compliance Assurance Monitoring (CAM) Requirements

The storage silos are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. Since the storage silos are not large pollutant specific emission units, the Permittee has no CAM requirements at this time and shall submit the information required under 40 CFR 64.4 as a part of an application for renewal of this permit [40 CFR 64.5(b)].

b. Pursuant to Section 39.5(7)(b) and (d)(ii) of the Act, the Permittee shall visually inspect the filters and cyclones to determine the need for cleaning or replacement, on at least a monthly basis.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected PM emission units to demonstrate compliance with Conditions 5.6.1 and 7.2.3, pursuant to Section 39.5(7)(b) of the Act:

a. Throughput of materials, including plastic resin (silos), waste paper (shredder and balers), and scrap polystyrene (grinders), in ton/month and ton/year;

b. Operating schedule of the affected PM emission units (hour/month and hour/year);

- c. Records of control equipment inspection, cleaning, and replacement of filters; and
- d. Annual aggregate PM emissions from each PM emission unit, with supporting calculations

7.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected PM emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits of Condition 5.6.1 or 7.2.3(b) as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected PM emission units. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.2.12 Compliance Procedures

- a. Compliance with the PM emission limitation of Condition 7.2.3(b) is addressed by the monitoring requirements in Condition 7.2.8(b) and the records required in Condition 7.2.9(b).
- b. Compliance with the emission limit in Condition 5.6 is addressed by the records required in Condition 7.2.9(a) and the emission factors and formulas listed below:
  - i. PM emission factors:

<u>Emission Unit</u>	<u>Controlled Emission Factors</u>	<u>Uncontrolled Emission Factors</u>
Silos	0.10 lb/hr	---
Shredder/Balers	---	0.1% of Paper Throughout
Grinders	0.01 lb/hr	---

The emission factors are based on engineering estimates.

ii. Emission formula for the silos and grinders:

(PM Emissions, lb) = (The Appropriate Emission  
Factor, lb/hr) x (Operating Time, hours)

iii. Emission formula for the shredder/balers:

(PM Emissions, lb) = 0.1% x (Paper Throughput, tons)  
x (1 - Cyclone Control Efficiency, %)

### 7.3 Paper/Plastic Extruders and Laminator

#### 7.3.1 Description

In the paper cups and tubs process, plastic resin pellets are pneumatically conveyed to the paper/plastic extruder to apply a thin layer of plastic to a paper roll stock. Prior to processing, the paper may be treated at two natural gas-fired flame treaters, to remove paper fibers and dust. Filler material, including calcium carbonate, may be used to supplement the plastic resin. VOM and HAP emissions from this process are exhausted outside the building.

Printed and plastic coated paper roll stock to be used for tub manufacturing is then processed at the laminator. At the laminator, two sheets of roll paper are bonded with a water-based adhesive to form a thick paper board. VOM and HAP emissions from this operation are vented inside the building.

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
PE-1, FT-1, FT-2	Paper/Plastic Extruder with Flame Treaters (2 at 1.6 mmBtu/hr)	Feb. 1988	None
LAM-1	Laminator	Jan. 1991	None

#### 7.3.3 Applicable Provisions and Regulations

- a. The "affected extruder" for the purpose of these unit-specific conditions, is an emission unit used to apply a thin layer of plastic to a paper, as described in Conditions 7.3.1 and 7.3.2. The "affected laminator" for the purpose of these unit-specific conditions, is an emission unit used to bond paper with an adhesive, as described in Conditions 7.3.1 and 7.3.2.
- b. The affected extruder and laminator are subject to 40 CFR 63, Subparts A and JJJJ, Paper and Other Web Coating, because the source operates web coating lines and is located at a plant site that is a major source as defined in 40 CFR 63.2. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.3320(b) and 63.3330(a), on and after December 5, 2005, each owner or operator of an existing affected source subject to 40 CFR 63 Subpart JJJJ shall:
  - i. Limit organic HAP emissions to no more than 4 percent of the mass of coating materials applied for each month; or

- ii. Limit organic HAP emissions to no more than 20 percent of the mass of coating solids applied for each month.
- c. The affected extruder and laminator are subject to 35 IAC 215.204(c), for paper coating, which provides that:

No owner or operator of a coating line shall cause or allow the emission of VOM to exceed 2.9 lb/gal (0.35 kg/L) for the coating as applied to paper. This emission limitation is expressed in units of VOM per volume of coating (excluding water and any compounds which are specifically exempted from the definition of VOM) as delivered to the coating applicator.
- d. Cleanup operations for the affected extruder and laminator are subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of this Condition shall apply only to photochemically reactive material [35 IAC 215.301].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected extruder and laminator (except for cleanup operations) are not subject to 35 IAC 215.301, because 35 IAC 215.209 excludes coating lines from this requirement.
- b. The affected extruder and laminator are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected extruder and laminator do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Control Requirements and Work Practices

Control requirements are not set for the affected extruder and laminator. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

7.3.6 Production and Emission Limitations

Production and emission limitations are not set for the affected extruder and laminator. However, there are general source-wide production and emission limitations set forth in Condition 5.6.

#### 7.3.7 Testing Requirements

- a. The Permittee shall perform all applicable testing for the affected extruder and laminator as specified by 40 CFR 63.3360.
- b. Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 215.208(a) and Section 39.5(7)(b) of the Act]:
  - i. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used in each affected tub gluing lines shall be determined according to USEPA Reference Method 24 or 24A of 40 CFR 60, Appendix A.
  - ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records required by Condition 7.3.9 directly reflect the application of such material and separately account for any additions of solvent.

#### 7.3.8 Monitoring Requirements

Monitoring requirements are not set for the affected extruder and laminator. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

#### 7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected extruder and laminator to demonstrate compliance with Conditions 5.6.1 and 7.3.3 through 7.3.7, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall retain all applicable records for the affected extruder and laminator as specified by 40 CFR 63.4100.
- b. Monthly records of the names and amounts of VOM-containing materials used, including coatings and cleanup solvents (tons/month and ton/year);
- c. VOM content of each coating and cleanup solvent (weight percent);
- d. Monthly and annual natural gas usage (ft<sup>3</sup>/month and ft<sup>3</sup>/year);

- e. Monthly and annual VOM emissions from the affected extruder and laminator, with supporting calculations (tons/month and ton/year).
- f. Annual aggregate NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM emissions from the flame treaters, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected extruder or laminator with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits of Conditions 5.6.1 or 7.3.3(b) as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.
- b. The Permittee shall submit all applicable reports for the affected extruder and laminator as specified in 40 CFR 63.4000.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected extruder and laminator. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.3.12 Compliance Procedures

- a. To determine compliance with Condition 7.3.3(b) (see also 40 CFR 63.3320), the Permittee shall follow the applicable compliance procedures for the affected extruder and laminator specified in 40 CFR 63.3370.
- b. Compliance of each coating with the VOM emission limitations in Condition 7.3.3(c) is addressed by the recordkeeping requirements in Condition 7.3.9 and by the use of either testing as required in Condition 7.3.7 or by use of the formulae listed below:

$$\text{Coating VOM Content} = V \times D / [1 - W \times D]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \sum (w_i/d_i)$$

w<sub>i</sub> = Percent exempt compound i in the coating

d<sub>i</sub> = Overall density of exempt compound i, in lb/gal

and the summation  $\sum$  is applied over water and all exempt compounds i, in the coating.

- c. Compliance with the emission limits in Condition 5.6.1, is addressed by the recordkeeping requirements in Condition 7.3.9 and VOM emission calculations based on the following equation:

- i. Extruder and laminator emissions, summed over all coatings, solvents, and thinners used:

$$\text{VOM Emissions (lb)} = \sum [\text{Coating Usage (gal)} * \text{Coating Density (lb/gal)} * \text{VOM Content of Coating (wt. \%)}] + \sum [\text{Solvent/Thinner Usage (gal)} * \text{Solvent/Thinner Density (lb/gal)} * \text{VOM Content of Solvent/Thinner (wt. \%)}].$$

- ii. Plastic resin emissions:

$$\text{VOM Emissions (lb)} = \text{Coating Usage (lb)} * 157.4 \text{ lb}/10^6 \text{ lb} / 1,000,000$$

Where 157.4 lb/10<sup>6</sup> lb is the emission factor for low density polyethylene extrusion coating as published in the *Journal of the Air & Waste Management Association*, June 1996.

- iii. Emission factors for natural gas combustion:

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

The emission factors (lb/mmscf) are for Natural Gas-Fired Small Boilers (<100 mmBtu/hr Heat Input) from AP-42 Section 1.4, Tables 1.4-1 and 1.4-2 (March 1998).

(Emissions, lb) = (The Appropriate Emission Factor,  
lb/mmscf) x (Natural Gas Usage, mmscf)

7.4 Corona Arc Treaters

7.4.1 Description

In the paper cups and tubs process, following the extrusion, the plastic coated paper roll stock may be treated at two Corona arc treaters. The corona arc treatment enables printing ink to adhere to the plastic coating. Ozone emissions from the corona arc treaters are controlled at two ozone decomposition units, and exhausted outside the building. There are no other emissions of criteria pollutants from these units.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
COR-1, COR-2	Corona Arc Treaters	Nov. 2002 and Dec. 2003	Ozone Decomposition Units (OZONE-1, OZONE-2)

7.4.3 Applicable Provisions and Regulations

- a. The "affected corona arc treaters" for the purpose of these unit-specific conditions, are emission units used to treat materials prior to printing, as described in Conditions 7.4.1 and 7.4.2.
- b. There are no applicable regulations for the affected corona arc treaters.

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected corona arc treaters are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected corona arc treaters are not subject to an emission limitation or standard for the applicable regulated air pollutant (ozone).

7.4.5 Control Requirements and Work Practices

Control requirements are not set for the affected corona arc treaters. However, there may be requirements for general source-wide control requirements set forth in Condition 5.5.

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected corona arc treaters are subject to the following:

- a. Ozone emissions from the affected corona arc treaters shall not exceed 9.2 tons per year. This limit is based on the power supply rating of 15 kW, operating time of 8,400 hours per year, and the manufacturer's emission factor of 0.073 lb O<sub>3</sub>/kW-hr.

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). These limits contain revisions to previously issued Permit 02100042. Specifically, the limit of 4.6 tons per year for a single unit was increased to 9.2 tons per year for both units.

7.4.7 Testing Requirements

Testing requirements are not set for the affected corona arc treaters. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.4.8 Monitoring Requirements

Monitoring requirements are not set for the affected corona arc treaters. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected corona arc treaters to demonstrate compliance with Conditions 5.6.1 and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Record of operation of the corona arc treaters (kW and hours per month);
- b. Record of catalyst replacement for the ozone decomposition units; and
- c. Annual aggregate ozone emissions, with supporting calculations.

7.4.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected corona arc treater with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits of Condition 5.6.1 or 7.4.6 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected corona arc treaters. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.4.12 Compliance Procedures

- a. Compliance with the emission limit in Conditions 5.6 and 7.4.6(a) is addressed by the records required in Condition 7.4.9 and the emission factor (0.073 lb O<sub>3</sub>/kW-hr) and formula listed below:

$$\text{(Ozone Emissions, lb)} = (0.073 \text{ lb O}_3/\text{kW-hr}) \times (\text{Operating Rate, kW}) \times (\text{Operating Time, hr})$$

## 7.5 Flexographic Printing Presses and Plate Maker

### 7.5.1 Description

In the paper cups and tubs process, plastic coated roll stock is printed on at one or more of the seven flexographic printing presses. Each press has a natural gas-fired drier. The VOM, HAP, and natural gas combustion emissions are exhausted outside the building.

In the paper cups and tubs process, the flexographic plates used at the presses are made at the plate maker. VOM emissions from this operation are exhausted outside the building.

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
FP-1 through FP-7	Flexographic Printing Presses with Dryers (8.28 mmBtu/hr Total)	1974-1998	None
PM-1	Plate Maker	Oct. 2000	None

### 7.5.3 Applicable Provisions and Regulations

- a. The "affected flexographic printing presses" for the purpose of these unit-specific conditions, are presses used to apply flexographic ink to a substrate, as described in Conditions 7.5.1 and 7.5.2. The "affected plate maker" for the purpose of these unit-specific conditions, is an emission unit used to make flexographic plates, as described in Conditions 7.5.1 and 7.5.2.
- b. The affected flexographic printing presses are subject to 40 CFR 63, Subparts A and KK, Printing and Publishing, because the source operates wide-web flexographic printing presses and is located at a plant site that is a major source as defined in 40 CFR 63.2. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to the limits in Condition 7.5.6(c), this source is subject only to the recordkeeping requirements of Condition 7.5.9(a) [40 CFR 63.820(a) and 63.821(b)].
- c. The affected flexographic printing presses and plate maker are subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of this Condition shall apply only to photochemically reactive material [35 IAC 215.301].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected flexographic printing presses are not subject to 35 IAC 215, Subpart P: Printing and Publishing, because the aggregate uncontrolled VOM emissions from all flexographic printing presses are limited to less than 907 Mg (1000 tons) per year (see Condition 7.5.6(a)) [35 IAC 215.402].
- b. The affected flexographic printing presses and plate maker are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected flexographic printing presses and plate maker do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Control Requirements and Work Practices

- a. VOM content of the material used in the plate maker shall not exceed 7.26 lb/gal. This limit was established in Permit 00080065.

7.5.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected flexographic printing presses and plate maker are subject to the following:

- a. i. Emissions from the flexographic printing presses, including cleanup operations and emissions associated with natural gas combustion, shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
3.19	31.93

These limits are based on the maximum production rate, VOM content of inks, year round operations, and standard emission factors for natural gas combustion.

- ii. 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].
- iii. The above limitations contain revisions to previously issued Permits 95110027 and 97090086. 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 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, all flexographic printing presses are included in the limits, and short term limits were changed from an hourly to a monthly basis. The previous permits only limited VOM emissions from Press FP-6 (0.9 ton/year) and FP-7 (7.1 tons/year) [T1R].

These limits also ensure that the flexographic printing presses are not subject to the control requirements of 35 IAC 215, Subpart P, Printing and Publishing, which generally applies to sources with aggregate uncontrolled VOM emissions greater than 1,000 tons per year.

- b. i. Emissions from the plate maker shall not exceed the following limits:

<u>Solvent Usage</u>		<u>VOM Emissions</u>	
<u>(Gal/Month)</u>	<u>(Gal/Year)</u>	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
330	3,305	1.2	12.0

These limits are based on the maximum material usage, the VOM content limit in Condition 7.6.5, and potential emissions equaling 100% of VOM usage.

- ii. 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].
- iii. The above limitations contain revisions to previously issued Permit 00080065. 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 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 solvent usage and VOM emission limits were increase by a factor of 6. This means that the annual VOM emission limit was increased by 10 tons per year, from 2.0 to 12.0, and is still less than the level for a new major source or major modification [T1R].

- c. The owner or operator shall not apply more than 400 kg per month, for every month, of organic HAP on the affected flexographic printing presses. The above limitation is being established in this permit. This limit ensures that the affected flexographic printing presses are not subject to the control requirements of 40 CFR Part 63, Subpart KK.

#### 7.5.7 Testing Requirements

Testing requirements are not set for the affected flexographic printing presses and plate maker. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

#### 7.5.8 Monitoring Requirements

Monitoring requirements are not set for the affected flexographic printing presses and plate maker. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

#### 7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected flexographic printing presses and plate maker to demonstrate compliance with Conditions 5.6.1 and 7.5.3 through 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain records of the total volume and organic HAP content of each material applied on the affected flexographic printing presses during each month [40 CFR 63.829(e)(2)];
- b. Monthly records of the names and amounts of VOM-containing materials used, including inks and cleanup solvents (tons/month and ton/year);
- c. VOM content of each ink and cleanup solvent (weight percent);
- d. Monthly and annual natural gas usage (ft<sup>3</sup>/month and ft<sup>3</sup>/year);

- e. Monthly and annual VOM emissions from each emission unit, with supporting calculations (tons/month and ton/year); and
- f. Annual aggregate NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM emissions from the dryers, based on fuel consumption and the applicable emission factors, with supporting calculations.

#### 7.5.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected flexographic printing press or plate maker with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits or operational limits of Conditions 5.6.1 or 7.5.6 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.
  - ii. If there is an exceedance of the operational limits of Condition 7.5.6(c) as determined by the records required by this permit, the Permittee shall submit a notification within 30 days after the deviation. The notification shall include the Permittee's plan for complying with the standards of 40 CFR 63.825 and other applicable requirements of 40 CFR 63 Subparts A and KK.

#### 7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected flexographic printing presses and plate maker. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

#### 7.5.12 Compliance Procedures

- a. Compliance with Conditions 7.5.3(b), 7.5.5(a), and 7.5.6(c) is addressed by the records required in Condition 7.5.9(a).
- b. Compliance with the emission limits in Condition 5.6 and 7.5.6 is addressed by the records required in Condition 7.5.9 and emission factors and formulas listed below:

- i. VOM emissions from the affected flexographic printing presses shall be calculated using the following equation, summed over all inks and extenders used:

$$E = \sum I \times V_i + \sum E \times V_e$$

Where:

E = VOM emissions (tons)

I = Ink usage (tons)

$V_i$  = VOM content of inks (fraction)

E = Extender usage (tons)

$V_e$  = VOM content of extender (fraction)

- ii. VOM emissions from cleanup solvents shall be calculated using the following equation, summed over all cleaning solvents used:

$$E = \sum C \times V_c$$

Where:

E = VOM emissions (tons)

C = Cleaner usage (tons)

$V_c$  = VOM content of cleaner (fraction)

- iii. Emission factors for natural gas combustion:

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

The emission factors (lb/mmscf) are for Natural Gas-Fired Small Boilers (<100 mmBtu/hr Heat Input) from AP-42 Section 1.4, Tables 1.4-1 and 1.4-2 (March 1998).

(Emissions, lb) = (The Appropriate Emission Factor, lb/mmscf) x (Natural Gas Usage, mmscf)

- iv. Plate maker emissions:

VOM Emissions (lb) = Washout Solution Usage (gal) \* Washout Solution Density (lb/gal) \* VOM Content of Ink (wt. %).

## 7.6 UV Offset Printing Presses

### 7.6.1 Description

In the polystyrene cups and lids process, the final step is the UV offset printing. The cups may be printed on at one or more of the three UV offset printing presses. VOM emissions from this process are exhausted outside the building.

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
UV-1, UV-2, UV-3	UV Offset Printing Presses	Jan. 2001 and Nov. 2001	None

### 7.6.3 Applicable Provisions and Regulations

- a. The "affected UV offset printing presses" for the purpose of these unit-specific conditions, are presses used to print low- or no-VOM inks onto polystyrene materials, as described in Conditions 7.6.1 and 7.6.2.
- b. The affected UV offset printing presses are subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of this Condition shall apply only to photochemically reactive material [35 IAC 215.301].

### 7.6.4 Non-Applicability of Regulations of Concern

- a. The affected UV offset printing presses are not subject to 35 IAC 215, Subpart P, Printing and Publishing, because the affected UV offset printing presses are not used for flexographic or rotogravure printing.
- b. The affected UV offset printing presses are not subject to 40 CFR Part 63, Subpart KK, NESHAP for Printing and Publishing, because the affected UV offset printing presses are not used for publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing.
- c. The affected UV offset printing presses are not subject to 40 CFR Part 63, Subpart PPPP, NESHAP for Surface Coating of Plastic Parts and Products, because the affected UV offset printing presses do not use 100 gallons or more of coatings that contain HAP [40 CFR 63.4481(b)].

- d. The affected UV offset printing presses are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected UV offset printing presses do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.6.5 Control Requirements and Work Practices

Control requirements are not set for the affected UV offset printing presses. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

#### 7.6.6 Production and Emission Limitations

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

- a.
  - i. VOM emissions from the UV offset printing presses shall not exceed negligible emission rates of 0.5 ton/month and 4.83 ton/year.
  - ii. The above limitations contain revisions to previously issued Permits 01060025 and 01110007. 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 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 short term limit was changed from 0.3 lb/hr to 0.5 ton/month and the annual limit was changed from 1.32 ton/year to 4.83 ton/year. This means that the annual VOM emission limit was increased by 3.51 tons per year and is still less than the level for a new major source or major modification [T1R].
- b.
  - i. The emissions of HAPs from UV offset printing press UV-3 shall not exceed 10 tons per year of an single HAP or 25 tons per year of any combination of such HAPs from each emission unit.

- ii. The above limitations were established in Permit 01110007. These limits ensure that machine PS22 and the Cup Line are not subject to the requirements of Section 112(g) of the Clean Air Act.
- c. The affected UV offset printing presses shall not use 100 gallons per year or more of coatings that contain HAP. The above limitation is being established in this permit. These limit ensures that the affected UV offset printing presses are not subject to the control requirements of 40 CFR Part 63, Subpart PPPP.

#### 7.6.7 Testing Requirements

Testing requirements are not set for the affected UV offset printing presses. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

#### 7.6.8 Monitoring Requirements

Monitoring requirements are not set for the affected UV offset printing presses. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

#### 7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected UV offset printing press to demonstrate compliance with Conditions 5.6.1 and 7.6.3 through 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly records of the names and amounts of VOM-containing materials used, including UV ink, cleanup solvents and washout solution (tons/month and ton/year);
- b. VOM and HAP content of each UV ink and cleanup solvent (weight percent); and
- c. Monthly and annual VOM emissions from each emission unit, with supporting calculations (tons/month and ton/year).

#### 7.6.10 Reporting Requirements

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

- i. If there is an exceedance of the emissions limits or operational limits of Conditions 5.6.1, 7.6.5, or 7.6.6 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.6.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected UV offset printing presses. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

#### 7.6.12 Compliance Procedures

- a. Compliance with the VOM emission limits in Conditions 5.6.1 and 7.6.6, is addressed by the recordkeeping requirements in Condition 7.6.9 and VOM emission calculations based on the following equations:

- i. UV offset printing press emissions, summed over all inks and solvents used:

$$\text{VOM Emissions (lb)} = \sum [\text{Ink Usage (gal)} * \text{Ink Density (lb/gal)} * \text{VOM Content of Ink (wt. \%)}] + \sum [\text{Solvent Usage (gal)} * \text{Solvent Density (lb/gal)} * \text{VOM Content of Solvent (wt. \%)}].$$

7.7 Tub Gluing

7.7.1 Description

The final step in the manufacturing of paper cups and tubs is the finishing process. The tubs are finished at one or more of the seven tub gluing lines, where the bottoms and sides of the tubs are assembled and sealed. The sealing can be accomplished by electrically heating the plastic to form the bond or with the application of water-based adhesive. VOM and HAP emissions from the tub gluing are vented inside the building.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
TUB-1	7 Tub Gluing Lines	Jan. 1987	None

7.7.3 Applicable Provisions and Regulations

- a. The "affected tub gluing lines" for the purpose of these unit-specific conditions, are emission units used to apply adhesives for the finishing of tubs, as described in Conditions 7.7.1 and 7.7.2. An adhesive is considered a coating for purposes of this section.
- b. The affected tub gluing lines are subject to 35 IAC 215.204(c), for paper coating, which provides that:  
  
No owner or operator of a coating line shall cause or allow the emission of VOM to exceed 2.9 lb/gal (0.35 kg/L) for the coating as applied to paper. This emission limitation is expressed in units of VOM per volume of coating (excluding water and any compounds which are specifically exempted from the definition of VOM) as delivered to the coating applicator.

7.7.4 Non-Applicability of Regulations of Concern

- a. The affected tub gluing lines are not subject to 35 IAC 215.301, because 35 IAC 215.209 excludes coating lines from this requirement.
- b. The affected tub gluing lines are not subject to 40 CFR Part 63, Subpart JJJJ, NESHAP for Paper and Other Web Coating, because the affected tub gluing lines are not web coating lines as defined at 40 CFR 63.3310.
- c. The affected tub gluing lines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tub gluing lines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.7.5 Control Requirements and Work Practices

Control requirements are not set for the affected tub gluing lines. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

7.7.6 Production and Emission Limitations

Production and emission limitations are not set for the affected tub gluing lines. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.7.7 Testing Requirements

a. Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 215.208(a) and Section 39.5(7)(b) of the Act]:

- i. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used in each affected tub gluing lines shall be determined according to USEPA Reference Method 24 or 24A of 40 CFR 60, Appendix A.
- ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records required by Condition 7.7.9 directly reflect the application of such material and separately account for any additions of solvent.

7.7.8 Monitoring Requirements

Monitoring requirements are not set for the affected tub gluing lines. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected tub gluing lines to demonstrate compliance with Conditions 5.6.1, 7.7.3, and 7.7.7, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall collect and record the following operational information:
  - i. The name and identification number of each coating as applied on the affected tub gluing lines;
  - ii. The usage of each coating, solvent, and any other material containing VOM used on the affected tub gluing lines (gallon/month and gallon/year);

- iii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on the affected tub gluing lines; and
  - iv. The VOM content (weight percent) and density (pound/gallon) of each coating, cleaning solvent, and any other material containing VOM;
- b. The annual VOM emissions of the affected tub gluing lines, based on calculation procedures specified in Condition 7.7.12.
- c. Records of the testing of VOM content of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:
- i. Identification of materials used, results of analysis, documentation of analysis methodology, and person performing analysis; or
  - ii. Records from the supplier of the material, such as material safety data sheets, certified product data sheets, or environmental data sheets, which document such testing.

#### 7.7.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tub gluing line with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
- i. If there is a deviation from the requirements of Condition 7.7.3(b) as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.7.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected tub gluing lines. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.7.12 Compliance Procedures

- a. Compliance of each coating with the VOM emission limitations in Condition 7.7.3(c) is addressed by the recordkeeping requirements in Condition 7.7.9 and by the use of either testing as required in Condition 7.7.7 or by use of the formulae listed below:

$$\text{Coating VOM Content} = V \times D / [1 - W \times D]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \sum (w_i / d_i)$$

w<sub>i</sub> = Percent exempt compound i in the coating

d<sub>i</sub> = Overall density of exempt compound i, in lb/gal

and the summation  $\sum$  is applied over water and all exempt compounds i, in the coating.

- b. Compliance with the VOM emission limit in Condition 5.6.1, is addressed by the recordkeeping requirements in Condition 7.7.9 and VOM emission calculations based on the following equation:

- i. Tub gluing emissions, summed over all coatings, solvents, and thinners used:

$$\begin{aligned} \text{VOM Emissions (lb)} = & \sum [\text{Coating Usage (gal)} * \text{Coating} \\ & \text{Density (lb/gal)} * \text{VOM Content of Coating (wt. \%)}] + \\ & \sum [\text{Solvent/Thinner Usage (gal)} * \text{Solvent/Thinner} \\ & \text{Density (lb/gal)} * \text{VOM Content of Solvent/Thinner} \\ & \text{(wt. \%)}]. \end{aligned}$$

## 7.8 Polystyrene Extrusion Machines

### 7.8.1 Description

In the polystyrene cups and lids process, polystyrene sheets are extruded at one or more of the polystyrene extrusion machines. Filler material, including calcium carbonate, may be used to supplement the polystyrene. This operation emits VOM and styrene (a HAP). Twenty of the machines exhaust outside the building, once machine vents inside the building, and one machine is controlled by an electrostatic precipitator (for PM emissions), which exhausts outside the building. The electrostatic precipitator is not required to achieve compliance with a PM emission limitation or standard.

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

Emission Unit	Description	Date Constructed	Emission Control Equipment
PS-1 through PS-15, PS-18 through PS-22, Cono-Clip Line, Cup Line	22 Polystyrene Extrusion Machines	1979-1987 (PS-21: 2000, Cup Line: 2001, PS-22: 2004)	Electrostatic Precipitator (For the Cup Line)

### 7.8.3 Applicable Provisions and Regulations

- a. The "affected PS extrusion machines" for the purpose of these unit-specific conditions, are emission units used in the extrusion of polystyrene, as described in Conditions 7.8.1 and 7.8.2.
- b. The affected PS extrusion machines are subject to 35 IAC 212.321(b), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(a)].
- d. The affected PS extrusion machines are subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of this Condition shall apply only to photochemically reactive material [35 IAC 215.301].

7.8.4 Non-Applicability of Regulations of Concern

- a. The affected PS extrusion machines are not subject to 35 IAC 215, Subpart Q, because the affected PS extrusion machines are not used to manufacture polystyrene.
- b. The affected PS extrusion machines are not subject to 40 CFR Part 63, Subpart JJJ, NESHAP for Group IV Polymers and Resins, because extruding units are exempt from the definition of a thermoplastic product process unit [40 CFR 63.1310(d)(4)].
- c. The affected PS extrusion machines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected PS extrusion machines do not use an add-on control device to achieve compliance with an emission limitation or standard. The electrostatic precipitator which is used for Cup Line PM emissions is not required to achieve compliance with 35 IAC 212.321, and a control efficiency is not used in calculating PM emissions.

7.8.5 Control Requirements and Work Practices

- a. VOM (styrene) content of the material used in the PS extrusion machines shall not exceed 0.085% by weight. This limit was established in Permits 01060025 and 03060015.

7.8.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected PS extrusion machines are subject to the following:

- a. i. Emissions from the affected PS extrusion machines shall not exceed the following limits:

VOM Usage		VOM (Styrene) Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
3.0	30	3.0	30

These limits are based on the maximum material usage, the VOM content limit in Condition 7.8.5, and potential emissions equaling 100% of VOM usage.

- ii. 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].

- iii. The above limitations contain revisions to previously issued Permit 03060015. 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 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 VOM usage and VOM emission limits were increase by a factor of 2.5. This means that the annual VOM emission limit was increased by 18 tons per year, from 12 to 30, and is still less than the level for a new major source or major modification [T1R].
- b.
  - i. The emissions of HAPs from machine PS22 shall not exceed 10 tons per year of an single HAP or 25 tons per year of any combination of such HAPs from each emission unit.
  - ii. The above limitations were established in Permit 03060015. These limits ensure that machine PS22 and the Cup Line are not subject to the requirements of Section 112(g) of the Clean Air Act.

#### 7.8.7 Testing Requirements

Testing requirements are not set for the affected PS extrusion machines. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

#### 7.8.8 Monitoring Requirements

Monitoring requirements are not set for the affected PS extrusion machines. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

Note: The electrostatic precipitator used for controlling cup line PM emissions is not required to achieve compliance with a PM emission limitation or standard and is not included in PM emissions calculations.

#### 7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected PS extrusion machines to demonstrate compliance with Conditions 5.6.1 and 7.8.3 through 7.8.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Names and amounts of inks, extenders, adhesives, and cleanup solvents used (ton/month and ton/year);
- b. Amount of each batch of resin used in the extruders (ton/month and ton/year);
- c. VOM and HAP content of each ink, extruder, adhesive, cleanup solvent, and resin batch (wt. %);
- d. Operating schedule of the affected PS extrusion machines (hour/month and hour/year), or as an alternative, the Permittee may assume operation of each machine 24 hours per day; and
- e. Detailed calculations of VOM emissions, individual HAP emissions, and PM emissions (ton/month and ton/year).

#### 7.8.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected PS extrusion machine with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. If there is an exceedance of the emissions limits or operational limits of Conditions 5.6.1, 7.8.5, or 7.8.6 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.8.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected PS extrusion machines. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

#### 7.8.12 Compliance Procedures

- a. Compliance with the VOM content limit in Condition 7.8.5 is addressed by the records required in Condition 7.8.9(c).

- b. The following equation may be used to calculate VOM usage for the affected PS extrusion machines:

$$Te = \sum_i^n A_i B_i$$

Where:

Te = VOM usage in units of lb/mo

n = Number of different batches of resin used each month

i = Subscript denoting an individual resin batch

A<sub>i</sub> = Weight percent of VOM of each resin batch used each month (% weight)

B<sub>i</sub> = Amount of each resin batch used each month in units of lb/mo

- c. Compliance with the VOM emission limitations of Conditions 5.6.1 and 7.8.6(a) is addressed by the records required in Conditions 7.8.9(b) and (c), the VOM usage calculations above, and the assumption that 100% of VOM used is emitted.
- d. Compliance with the PM emission limitations of Conditions 5.6.1 and 7.8.3(b) is addressed by the records required in Condition 7.8.9(d) and an emission rate of 0.1 lb/hour/machine.

## 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 \_\_\_\_\_ (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].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

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

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

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

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	July 31
July - December	January 31

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

#### 8.6.2 Test Notifications

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

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

#### 8.6.3 Test Reports

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

- a. The name and identification of the affected unit(s);

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

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
  - i. Illinois EPA - Air Compliance Unit  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance & Enforcement Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Quality Planning Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Air Quality Planning Section (MC 39)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - iii. Illinois EPA - Air Regional Field Office  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

iv. USEPA Region 5 - Air Branch

USEPA (A - 18J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

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

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

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.

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

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

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

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

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

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

#### 9.2.2 Duty to Maintain Equipment

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

#### 9.2.3 Duty to Cease Operation

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

#### 9.2.4 Disposal Operations

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

#### 9.2.5 Duty to Pay Fees

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

### 9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

#### 9.4 Obligation to Comply with Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

##### 9.5.4 Illinois EPA Liability

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

##### 9.5.5 Property Rights

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

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

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

### 9.6.2 Records of Changes in Operation

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

### 9.6.3 Retention of Records

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

## 9.7 Annual Emissions Report

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

## 9.8 Requirements for Compliance Certification

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

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

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

#### 9.9 Certification

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

#### 9.10 Defense to Enforcement Actions

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

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

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

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

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

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

#### 9.11 Permanent Shutdown

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

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

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

##### 9.12.2 Reopening and Revision

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

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

### 9.12.3 Inaccurate Application

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

### 9.12.4 Duty to Provide Information

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

### 9.13 Severability Clause

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

### 9.14 Permit Expiration and Renewal

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

Note: Pursuant to Sections 39.5(5) (h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

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

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

**10.0 ATTACHMENTS**

Attachment 1 Example Certification by a Responsible Official

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

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

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

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

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

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

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- i. 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 which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

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

where:

P = Process weight rate; and

E = Allowable emission rate; and,

A. Up to process weight rates of 408 Mg/hr (450 T/hr):

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

B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

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

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

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

where:

P = Process weight rate; and

E = Allowable emission rate; and,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

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

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

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

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

Metric		English	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>T/hr</u>	<u>lb/hr</u>
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

#### Attachment 4 Guidance

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

Guidance On Revising A CAAPP Permit:

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

Guidance On Renewing A CAAPP Permit:

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

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

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

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

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

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

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

**BUREAU OF AIR**

*DIVISION of AIR POLLUTION CONTROL*

*PERMIT SECTION*

PROJECT SUMMARY for the  
PROPOSED TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

International Paper Foodservice Business  
500 Dacey Drive  
Shelbyville, Illinois 62565

Permit Engineer/Technical Contact: Jonathan Sperry, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

Springfield, Illinois

## I. INTRODUCTION

This source has applied for an initial Title V - Clean Air Act Permit Program (CAAPP) operating permit (I.D. 173030AAP, Permit #04090011) for its existing operation. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by the federal Clean Air Act, as amended in 1990, and 40 CFR Part 70. Unlike state operating permits, the conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A Title V permit contains conditions listing the applicable state and federal air pollution control regulations that apply to a source. The permit conditions also establish emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit.

## II. SOURCE DESCRIPTION INFORMATION

### a. Location and nature of business

The source manufactures paper cups and tubs and polystyrene cups and lids. In addition, the source operates a boiler and heaters to provide steam and comfort heating.

### b. National Ambient Air Quality Standard status for this area

This source is located in an area that is in attainment of the National Ambient Air Quality Standards for all pollutants.

### c. Major source status

The proposed permit is based on:

1. The source requiring a CAAPP permit as a major source of HAP emissions.
2. The source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA (see Condition 5.2 of the proposed permit).

d. Significant emission units

Emission Unit	Description	Date Constructed	Emission Control Equipment
B-1	Boiler (20.9 mmBtu/hr)	Jan. 1974	None
H-1, H-2, H-3	Space Heaters (3 at 5.0 mmBtu/hr)	April 1996	None
S-1 through S-10	Storage Silos	1992-2001	Silo Filters (SF-1 through SF-10)
PE-1, FT-1, FT-2	Paper/Plastic Extruder with Flame Treaters (2 at 1.6 mmBtu/hr)	Feb. 1988	None
COR-1, COR-2	Corona Arc Treaters	Nov. 2002 and Dec. 2003	Ozone Decomposition Units (OZONE-1, OZONE-2)
FP-1 through FP-7	Flexographic Printing Presses with Dryers (8.28 mmBtu/hr Total)	1974-1998	None
PM-1	Plate Maker	Oct. 2000	None
TUB-1	7 Tub Gluing Lines	Jan. 1987	None
LAM-1	Laminator	Jan. 1991	None
SHRED-1, BAL-1, BAL-2	Waste Paper Collection System Shredder and Balers	2002 (Cyclones C-3 and C-4: 1985)	Cyclones C-1 through C-4
PS-1 through PS-15, PS-18 through PS-22, Cono-Clip Line, Cup Line	22 Polystyrene Extrusion Machines	1979-1987 (PS-21: 2000, Cup Line: 2001, PS-22: 2004)	Electrostatic Precipitator
GR-1 through GR-29	Polystyrene Grinders	1979-2004	Bag Filters (BF-1 through BF-29)
UV-1, UV-2, UV-3	UV Offset Printing Presses	Jan. 2001 and Nov. 2001	None

## III. EMISSIONS INFORMATION

The proposed permit limits the source wide maximum annual emissions from significant emission units at the source. Insignificant activities at this source are not accounted for in the source-wide limit. Further unit specific emission unit limitations are found within Sections 5 and 7 of the proposed permit.

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

Pollutant	Tons/Year
Volatile Organic Material (VOM)	89.71
Sulfur Dioxide (SO <sub>2</sub> )	0.12
Particulate Matter (PM)	64.20
Nitrogen Oxides (NO <sub>x</sub> )	20.75
Hazardous Air pollutant (HAP), not included in VOM or PM	9.59
Total	184.37

This proposed permit contains terms and conditions that address the applicability, and, if determined applicable, substantive requirements of Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, 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 proposed permit by T1, T1R, or T1N. Any conditions established in a construction permit [T1] pursuant to Title I and not revised or deleted in this proposed permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new [T1N] or revise [T1R] such conditions in a Title I permit, those conditions are consistent with the information provided in the Title V application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This proposed permit does establish newly revised [T1R] requirements.

#### IV. EMISSIONS CONTROL PROGRAMS INFORMATION

As of the date of issuance of this permit, there are no such emissions control programs applicable to this source.

#### V. COMPLIANCE ASSURANCE MONITORING (CAM) PLAN INFORMATION

The Compliance Assurance Monitoring (CAM) plan is a program for pollutant-specific emission units which use an add-on control device to achieve compliance with an emission limitation or standard, has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than major source threshold levels, and is not specifically exempt by 40 CFR Part 64. There are no specific emission units that require a CAM plan at this time, as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

The storage silos are subject to 40 CFR Part 64, but the Permittee is not required to submit a CAM plan until the Permittee submits a renewal application for this permit. This is because the storage silos are not large pollutant specific emission units, as defined in 40 CFR 64.5(a).

VI. OTHER PERTINENT INFORMATION

a. Risk Management Plan (RMP)

A risk management plan (RMP) is a program required for a source affected by Chemical Accident Prevention for reducing the levels of emissions during an emergency, consistent with safe operating procedures. If the Permittee becomes subject to the RMP then the Permittee would be required to immediately implement the appropriate steps described in this plan should an emergency be declared. The Permittee then would be required to maintain and have this plan on file with the Illinois EPA.

b. Episode Action Plan (EAP)

An episode action plan (EAP) is a program for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Permittee is required to immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared. The Permittee is required to maintain and have this plan on file with the Illinois EPA. An approved plan is currently on file with the Illinois EPA.

VII. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source.

VIII. REQUEST FOR COMMENTS

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

Comments are requested by the Illinois EPA for the proposed 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.