

217/782-2113

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

PERMITTEE

Sun Chemical Corporation - General Printing Ink Division
Attn: Wayne Snape
4910 South Monitor Avenue
Chicago, Illinois 60683

<u>Application No.:</u> 96030120	<u>I.D. No.:</u> 031821AAF
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 7, 1996
<u>Operation of:</u> Ink Manufacturing Process	
<u>Date Issued:</u> March 6, 2000	<u>Expiration Date</u> ² : March 6, 2005
<u>Source Location:</u> 4910 South Monitor Avenue, Chicago, Cook County	
<u>Responsible Official:</u> Adam R. Meister, Manager Manufacturing Services - Engineering	

This permit is hereby granted to the above-designated Permittee to operate a flexographic and rotogravure inks 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:psj

cc: Illinois EPA, FOS Region #1
USEPA

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

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Sun Chemical Corporation - General Printing Ink Division
4910 South Monitor Avenue
Chicago, Illinois 60683
773/581-2442

I.D. No.: 031821AAF

Standard Industrial Classification: 2893, Printing inks

1.2 Owner/Parent Company

Sun Chemical Corporation
222 Bridge Plaza South
Fort Lee, N. J. 07024

1.3 Operator

Sun Chemical Corporation - General Printing Ink Division
135 West Lake Street
Northlake, Illinois 60164

Adam R. Meister
708/562-0550 ext. 2430

1.4 General Source Description

Sun Chemical Corporation - General Printing Ink Division operates a facility at 4910 South Monitor Avenue in Chicago, Illinois. This facility manufactures printing inks and varnishes. The ink and varnish manufacturing process involves solution manufacture, premixing or high speed dispersion, small media milling, blending, filtering, and packaging. Liquid materials used in ink and varnish manufacturing are received in drums or in bulk. Solvents used in large quantities are stored in aboveground or underground storage tanks and/or in portable tote tanks. Dry materials are received and stored in bags or drums.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through E), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ATU	Allotment Trading Unit
Btu	British thermal unit
°C	degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
cm	centimeter
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
ft	feet
ft ³	cubic foot
gal	gallon
hr	hour
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
in	inch
kg	kilogram
kPa	kilopascal
lb	pound
m	meter
Mg	megagram
mmBtu	Million Btus
MSDS	Material Safety Data Sheet
mo	month
MW	Megawatt
N/A	Not applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
PM	Particulate Matter
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch atmospheric
psi	pounds per square inch
RMP	Risk Management Plan
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan

SO ₂	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industries
T	ton
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
TOC	Total Organic Compound
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOM	Volatile Organic Material
VOL	Volatile Organic Liquid
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Quality Control and Analytical Laboratory

- 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:

Bulk Tanker Unloading Operation

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

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

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

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In

particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit Group	Description	Date Constructed	Emission Control Equipment
Cutter Department - Cold Cut			
01	4 Mixing and Blending Vessels (H2, H3, H10, and H17)	Prior to 1970	None
02	5 Mixing and Blending Vessels (H11-15)	Prior To 1993	None
Cutter Department - Whites			
03	1 Mixing and Blending Vessel (H1)	Prior To 1988	None
Media Mill Department			
04	1 Mixing and Blending Vessel (H16)	Prior To 1988	Portable Dust Collector #1
05	3 Small Media Mills (N-1 to N-3)	Prior To 1993	None
Blending Department			
06	17 Mixing and Blending Vessels (H9A-H9Q)	Prior To 1970	Portable Dust Collector #2
07	5 Mixing and Blending Vessels (H4-8)	Prior To 1993	Portable Dust Collector #1
Ball Mill Department			
08	8 Ball Mills (S-1 to S-8)	Prior To 1970	None
Transfer Department			
09	Packaging	Prior To 1970	None
Still Department			
10	Distillation Unit	Prior To 1988	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Emissions of smoke or other particulate matter from any emission unit shall not exceed 30% opacity, except that opacity of greater than 30% but less than 60% shall be allowed for periods aggregating 8 minutes in any 60 minute period provided that such more opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any such emission unit owned and operated by the Permittee and provided further that such more opaque emissions permitted from each such unit shall be limited to 3 times per 24 hour period pursuant to 35 IAC 212.123(a) and (b).

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

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

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

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

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 Storage Tank Requirements

The following work practice requirements shall apply to each storage tank subject to 35 IAC Part 218, Subpart AA, including certain insignificant emission units described in Section 3:

- a. The Permittee shall equip tanks storing VOL with a vapor pressure greater than 10 kPa (1.5 psi) at 20 °C (68°F) with pressure/vacuum conservation vents set as a minimum at \pm 0.2 kPa (0.029 psi). These controls shall be operated at all times. An alternative air pollution control system may be used if it results in a greater emission reduction than these controls. Any alternative control system can be allowed only if

approved by the Illinois and approved by the USEPA as a SIP revision [35 IAC 218.626(a)].

- b. Stationary VOL storage containers with a capacity greater than 946 L (250 gal) shall be equipped with a submerged-fill pipe or bottom fill. These controls shall be operated at all times. An alternative control system can be allowed only if approved by the Illinois EPA and approved by the USEPA as a SIP revision [35 IAC 218.626(b)].

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

5.4.1 Monitoring Requirements for Leaks

The following work practice requirements shall apply to each emission unit subject to 35 IAC Part 218, Subpart AA, as further described in Section 7 and including certain insignificant emission units described in Section 3:

- a. Each pump shall be checked by visual inspection each calendar week for indications of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected [35 IAC 218.628(a)].
- b. Any pump, valve, pressure relief valve, sampling connection, open-ended valve and flange or connector containing a fluid which is at least 10 percent VOM by weight which appears to be leaking on the basis of sight, smell or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected [35 IAC 218.628(b)].
- c. A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the

equipment is adjusted or otherwise altered to allow operation without leaking [35 IAC 218.628(c)].

5.4.2 Clean Up Requirements

The following work practice requirements shall apply to each emission unit subject to 35 IAC Part 218, Subpart AA, as further described in Section 7 and including certain insignificant emission units described in Section 3:

- a. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].
- b. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	88.30
Sulfur Dioxide (SO ₂)	---
Particulate Matter (PM)	3.94
Nitrogen Oxides (NO _x)	---
HAP, not included in VOM or PM	---
TOTAL	92.24

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the Clean Air Act not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

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

5.6 General Recordkeeping Requirements

5.6.1. The Permittee shall maintain records of the following items to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions of the source, determined as the total of the emission data required to be kept by Section 7 (Unit Specific Condition) of this permit.

5.6.2 Recordkeeping for Paint and Ink Manufacturing

a. When a leak is detected, the owner or operator shall record the date of detection and repair and the record shall be retained at the source for at least two years from the date of each detection or each repair attempt, or for such longer period as may be required by this permit (See Conditions 5.6.3 and 9.6.3). The record shall be made available to any person upon verbal or written request during business hours [35 IAC 218.628(d)].

b. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)], including the following:

i. Vapor pressure of all VOL in kPa or psi at 68°F or 20°C and MSDS of all VOL stored in the tanks and record, to indicating compliance with 35 IAC 218.626 (see also Condition 5.2.7).

5.6.3 Retention and Availability of Records

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

- a. Annual emissions from the source in excess of the limits specified in Condition 5.5.1, within 30 days of such an occurrence.

5.7.2 Annual Emission Report

The annual emission report required pursuant to Condition 9.7 shall contain emissions information for the previous year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and cleaning solutions, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1;
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such equipment and does not result in the emission of any specified air contaminant not previously emitted; and
- c. Physical relocation of equipment on-site.

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Allowable Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

- a. For the purpose of estimating VOM emissions from the ink manufacturing processes, the following methods are to be used:
 - i. For closed processes, a BATCH ACT modeling program (or equivalent), per USEPA's methodology outlined in "Control of Volatile Organic Compound Emissions From Batch Processes - Alternative Control Techniques Information Document" (EPA 450/R-94-020);
 - ii. For open processes, emission factors that were developed from stack testing using TTE around typical operations. For this purpose, information from "National Association of Printing Ink Manufacturers Guide to Estimating VOC Emissions from Printing Ink Manufacturing" is acceptable.
- b. For the purpose of estimated VOM emissions from equipment leaks, the procedure in Protocol for Equipment Leak Emission Estimates (June 1993), EPA-453/R-93-026 is acceptable.
- c. For the purpose of estimating HAP emissions from equipment at the source, the weight percent (based on a 1992 USEPA survey) of each HAP for each finished

product times the VOM emissions contributed by that product is acceptable.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Once the ERMS begins, participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set during initial issuance of the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2 Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not

exceed 15 tons, not including VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit. This limitation is established at the request of the source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 IAC 205.205.

6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 35 IAC 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

6.4 Federal Enforceability

Section 6.0 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Cutter Department - Cold Cut

7.1.1 Description

The Cutter Department (Cold Cut) is a batch operation manufacturing varnish. This production of varnish is done by dissolving various resins in various solvents by mixing. Following mixing, these varnishes are filtered and packaged.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
01	4 Mixing and Blending Vessels (H2, H3, H10, and H17)	None
02	5 Mixing and Blending Vessels (H11-15)	None

7.1.3 Applicable Regulations

- a. An "affected ink manufacturing process" for the purpose of these unit-specific conditions, includes the emission units listed in Condition 7.1.2 used to produce various inks and varnishes.
- b. The affected ink manufacturing process is subject to 35 IAC 218, Subpart AA: Paint and Ink Manufacturing, because the source has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate. These requirements are described in Conditions 5.4 and 7.1.5(a).
- c. The affected ink manufacturing process is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 2) [35 IAC 212.322(a)].

- d. The affected ink manufacturing process is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive material.

7.1.4 Non-Applicability of Regulations of Concern

The affected ink manufacturing process is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to a source's VOM emission units which are included within any of the categories specified in 35 IAC 218, Subpart AA [35 IAC 218.980(a)].

7.1.5 Operational Limits and Work Practices

The Permittee shall comply with the following requirements, in addition to the source wide requirements in Condition 5.4:

a. Open-top Mills, Tanks, Vats or Vessels

- i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a)].
- ii. The cover remains closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b)].
- iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c)].

b. Clean Up Requirements

- i. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an

opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].

- ii. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected ink manufacturing process is subject to the following:

- a. Emissions from the affected ink manufacturing process shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Tanks H11 to H15	2.48	29.73

These limits are based on the maximum operating rates and maximum actual emission rates from the listed tanks.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permit 72120146. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification

pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the separate monthly and annual emission limits for the above-listed tanks were combined into one monthly and annual limit [T1R].

7.1.7 Testing Requirements

Upon request of the Illinois EPA or USEPA, the VOM emissions from an affected ink manufacturing process shall be determined in accordance with Reference Method 18, 25 or 25A, specified in 40 CFR 60 Appendix A, pursuant to 35 IAC 218.105. Use of an adaptation of these test methods may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. The Permittee must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified above will yield inaccurate results or are otherwise inappropriate and that the proposed adaptation is appropriate [35 IAC 218.105(f)].

7.1.8 Monitoring Requirements

In addition to the source wide monitoring requirements in Conditions 5.4.1 and 5.4.2, the Permittee shall perform the following monitoring procedures:

None

7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected ink manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.1.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)].
- b. Monthly and annual records of the following items for the affected ink manufacturing process:
 - i. Amount of ink and varnish production for all tanks (ton/mo and ton/yr);

- ii. Amount of ink and varnish production for Tanks H11, H12, H13, H14, and H15 (ton/mo and ton/yr);
- iii. VOM content for the ink and varnish production (weight percent);
- iv. Total VOM emissions calculated based on the compliance procedures in Condition 7.1.12. If the total VOM emissions for all tanks are less than the emission limits in Condition 7.1.6, then the separate records for the five tanks listed in subsection (ii) above are not required;
- v. MSDS of each solvent and any other VOM-containing raw material used;
- vi. Records of maximum process weight rate of raw materials (lb/hr); and
- vii. Records of HAP emissions (ton/yr).

7.1.10 Reporting Requirements

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

- a. Report of Deviation
 - i. Report of any deviation from the applicable permit requirements of Section 7.1 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].
 - ii. Report of any violation of the requirements of 35 IAC 218 Subpart AA by sending a copy of any record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation.

- b. At least 30 calendar days before changing the method of compliance for an affected ink manufacturing process, or the applicable emission determination method indicated in Condition 7.1.12, the permittee shall certify to the Illinois EPA that the affected ink manufacturing process will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such equipment and does not result in the emission of any specified air contaminant not previously emitted; and
- c. Physical relocation of equipment on-site.

7.1.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.1.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:
 - i. Total VOM emissions from each affected ink manufacturing process = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.

- ii. VOM emissions from process operations (including solvent cleaning) and filter openings:

VOM emissions = Production or Solvent Use (lb) x VOM Content (%VOM) x Emission Factor (lb/lb VOM).

- iii. VOM emissions from process equipment leaks:

VOM emissions = Charging Hours (hr) x Emission Rate (lb/hr).

- b. Compliance with the PM emission limitation in Condition 7.1.3(c) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected ink manufacturing process and associated control equipment.
- c. Compliance of the affected ink manufacturing process with the VOM emission limitation in Condition 7.1.3(d) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.2 Unit 02: Cutter Department - White

7.2.1 Description

The Cutter Department (Whites) is a batch operation manufacturing printing inks. The production of inks is done by mixing solvents and pigments. Following mixing, the finished ink is filtered and packaged.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
03	1 Mixing and Blending Vessel (H1)	None

7.2.3 Applicable Regulations

a. An "affected ink manufacturing process" for the purpose of these unit-specific conditions, includes the emission units listed in Condition 7.2.2 used to produce various inks and varnishes.

b. The affected ink manufacturing process is subject to 35 IAC 218, Subpart AA: Paint and Ink Manufacturing, because the source has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate. These requirements are described in Conditions 5.4 and 7.2.5(a).

c. The affected ink manufacturing process is subject to 35 IAC 212.321, 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 ink manufacturing process is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor

nuisance exists the limitation shall apply only to photochemically reactive material.

7.2.4 Non-Applicability of Regulations of Concern

The affected ink manufacturing process is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to a source's VOM emission units which are included within any of the categories specified in 35 IAC 218, Subpart AA [35 IAC 218.980(a)].

7.2.5 Operational Limits and Work Practices

The Permittee shall comply with the following requirements, in addition to the source wide requirements in Condition 5.4:

a. Open-top Mills, Tanks, Vats or Vessels

- i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a)].
- ii. The cover remains closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b)].
- iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c)].

b. Clean Up Requirements

- i. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].

- ii. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected ink manufacturing process is subject to the following:

- a. Emissions from the affected ink manufacturing process shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Tank H1	0.82	9.85

These limits are based on the maximum operating rates and maximum actual emission rates from the listed tank.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 72120146, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.2.7 Testing Requirements

Upon request of the Illinois EPA or USEPA, the VOM emissions from an affected ink manufacturing process shall be determined in accordance with Reference Method 18, 25 or 25A, specified in 40 CFR 60 Appendix A, pursuant to 35 IAC 218.105. Use of an adaptation of these test methods may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. The Permittee must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified above will yield inaccurate results or are otherwise

inappropriate and that the proposed adaptation is appropriate [35 IAC 218.105(f)].

7.2.8 Monitoring Requirements

In addition to the source wide monitoring requirements in Conditions 5.4.1 and 5.4.2, the Permittee shall perform the following monitoring procedures:

None

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected ink manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.2.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)].
- b. Monthly and annual records of the following items for the affected ink manufacturing process:
 - i. Amount of ink and varnish production (ton/mo and ton/yr);
 - ii. VOM content for the ink and varnish production (weight percent);
 - iii. Total VOM emissions calculated based on the compliance procedures in Condition 7.2.12;
 - iv. MSDS of each solvent and any other VOM-containing raw material used;
 - v. Records of maximum process weight rate of raw materials (lb/hr); and
 - vi. Records of HAP emissions (ton/yr).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected ink manufacturing process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such

deviations, and any corrective actions or preventive measures taken:

- a. Report of Deviation
 - i. Report of any deviation from the applicable permit requirements of Section 7.2 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].
 - ii. Report of any violation of the requirements of 35 IAC 218 Subpart AA by sending a copy of any record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation.
- b. At least 30 calendar days before changing the method of compliance for an affected ink manufacturing process, or the applicable emission determination method indicated in Condition 7.2.12, the permittee shall certify to the Illinois EPA that the affected ink manufacturing process will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such

equipment and does not result in the emission of any specified air contaminant not previously emitted; and

- c. Physical relocation of equipment on-site.

7.2.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.2.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:
 - i. Total VOM emissions from each affected ink manufacturing process = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.
 - ii. VOM emissions from process operations (including solvent cleaning) and filter openings:

$$\text{VOM emissions} = \text{Production or Solvent Use (lb)} \times \text{VOM Content (\%VOM)} \times \text{Emission Factor (lb/lb VOM)}.$$
 - iii. VOM emissions from process equipment leaks:

$$\text{VOM emissions} = \text{Charging Hours (hr)} \times \text{Emission Rate (lb/hr)}.$$
- b. Compliance with the PM emission limitation in Condition 7.2.3(c) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected ink manufacturing process and associated control equipment.
- c. Compliance of the affected ink manufacturing process with the VOM emission limitation in Condition 7.2.3(d) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.3 Units 03-04: Media Mill Department

7.3.1 Description

The Media Mill Department is a batch operation manufacturing ink. This production is done by mixing varnishes, solvents, and pigments. Following mixing, these inks are then milled. The finished ink is then filtered and packaged.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
04	1 Mixing and Blending Vessel (H16)	Portable Dust Collector #1
05	3 Small Media Mills (N-1 to N-3)	None

7.3.3 Applicable Regulations

a. An "affected ink manufacturing process" for the purpose of these unit-specific conditions, includes the emission units listed in Condition 7.3.2 used to produce various inks and varnishes.

b. The affected ink manufacturing process is subject to 35 IAC 218, Subpart AA: Paint and Ink Manufacturing, because the source has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate. These requirements are described in Conditions 5.4 and 7.3.5(a).

c. The affected ink manufacturing process is subject to 35 IAC 212.321, 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 ink manufacturing process is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive material.

7.3.4 Non-Applicability of Regulations of Concern

The affected ink manufacturing process is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to a source's VOM emission units which are included within any of the categories specified in 35 IAC 218, Subpart AA [35 IAC 218.980(a)].

7.3.5 Operational Limits and Work Practices

The Permittee shall comply with the following requirements, in addition to the source wide requirements in Condition 5.4:

a. Open-top Mills, Tanks, Vats or Vessels

- i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a)].
- ii. The cover remains closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b)].
- iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c)].

b. Grinding Mills

- i. No person shall operate a grinding mill for the production of paint or ink which is not maintained in accordance with the manufacturer's specifications [35 IAC 218.625(a)].

ii. No person shall operate a grinding mill fabricated or modified after the effective date of this Subpart which is not equipped with fully enclosed screens [35 IAC 218.625(b)].

c. Clean Up Requirements

i. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].

ii. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected ink manufacturing process is subject to the following:

a. Emissions from the affected ink manufacturing process shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Mills N1, N2, N3	1.52	18.27

These limits are based on the maximum operating rates and maximum actual emission rates from the listed mills.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 72120146, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification

addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.3.7 Testing Requirements

Upon request of the Illinois EPA or USEPA, the VOM emissions from an affected ink manufacturing process shall be determined in accordance with Reference Method 18, 25 or 25A, specified in 40 CFR 60 Appendix A, pursuant to 35 IAC 218.105. Use of an adaptation of these test methods may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. The Permittee must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified above will yield inaccurate results or are otherwise inappropriate and that the proposed adaptation is appropriate [35 IAC 218.105(f)].

7.3.8 Monitoring Requirements

In addition to the source wide monitoring requirements in Conditions 5.4.1 and 5.4.2, the Permittee shall perform the following monitoring procedures:

None

7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected ink manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.3.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)].
- b. The manufacturer's specifications shall be kept on file at the plant by the owner or operator of the grinding mill and be made available to any person upon verbal or written request during business hours [35 IAC 218.625(c)].
- c. Monthly and annual records of the following items for the affected ink manufacturing process:
 - i. Amount of ink and varnish production for all tanks and mills (ton/mo and ton/yr);

- ii. Amount of ink and varnish production for Mills N1, N2, and N3 (ton/mo and ton/yr);
- iii. VOM content for the ink and varnish production (weight percent);
- iv. Total VOM emissions calculated based on the compliance procedures in Condition 7.3.12. If the total VOM emissions for all tanks and mills are less than the emission limits in Condition 7.3.6, then the separate records for the mills listed in subsection (ii) above are not required;
- v. MSDS of each solvent and any other VOM-containing raw material used;
- vi. Records of maximum process weight rate of raw materials (lb/hr); and
- vii. Records of HAP emissions (ton/yr).

7.3.10 Reporting Requirements

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

- a. Report of Deviation
 - i. Report of any deviation from the applicable permit requirements of Section 7.3 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].
 - ii. Report of any violation of the requirements of 35 IAC 218 Subpart AA by sending a copy of any record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation.

- b. At least 30 calendar days before changing the method of compliance for an affected ink manufacturing process, or the applicable emission determination method indicated in Condition 7.3.12, the permittee shall certify to the Illinois EPA that the affected ink manufacturing process will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such equipment and does not result in the emission of any specified air contaminant not previously emitted; and
- c. Physical relocation of equipment on-site.

7.3.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.3.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:
 - i. Total VOM emissions from each affected ink manufacturing process = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.

- ii. VOM emissions from process operations (including solvent cleaning) and filter openings:

VOM emissions = Production or Solvent Use (lb) x VOM Content (%VOM) x Emission Factor (lb/lb VOM).

- iii. VOM emissions from process equipment leaks:

VOM emissions = Charging Hours (hr) x Emission Rate (lb/hr).

- b. Compliance with the PM emission limitation in Condition 7.3.3(c) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected ink manufacturing process and associated control equipment.
- c. Compliance of the affected ink manufacturing process with the VOM emission limitation in Condition 7.3.3(d) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.4 Units 05-06: Blending Department

7.4.1 Description

The Blending Department is a batch operation manufacturing ink. This production is done by mixing varnishes, solvents, and other raw materials. The finished ink is then filtered and packaged.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
06	17 Mixing and Blending Vessels (H9A-H9Q)	Portable Dust Collector #2
07	5 Mixing and Blending Vessels (H4-8)	Portable Dust Collector #1

7.4.3 Applicable Regulations

- a. An "affected ink manufacturing process" for the purpose of these unit-specific conditions, includes the emission units listed in Condition 7.4.2 used to produce various inks and varnishes.
- b. The affected ink manufacturing process is subject to 35 IAC 218, Subpart AA: Paint and Ink Manufacturing, because the source has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate. These requirements are described in Conditions 5.4 and 7.4.5(a).
- c. The affected ink manufacturing process (specifically Emission Unit 06) is subject to 35 IAC 212.321, 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 ink manufacturing process (specifically Emission Unit 05) is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 2) [35 IAC 212.322(a)].

- e. The affected ink manufacturing process is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive material.

7.4.4 Non-Applicability of Regulations of Concern

The affected ink manufacturing process is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to a source's VOM emission units which are included within any of the categories specified in 35 IAC 218, Subpart AA [35 IAC 218.980(a)].

7.4.5 Operational Limits and Work Practices

The Permittee shall comply with the following requirements, in addition to the source wide requirements in Condition 5.4:

a. Open-top Mills, Tanks, Vats or Vessels

- i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a)].
- ii. The cover remains closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b)].

iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c)].

b. Grinding Mills

i. No person shall operate a grinding mill for the production of paint or ink which is not maintained in accordance with the manufacturer's specifications [35 IAC 218.625(a)].

ii. No person shall operate a grinding mill fabricated or modified after the effective date of this Subpart which is not equipped with fully enclosed screens [35 IAC 218.625(b)].

c. Clean Up Requirements

i. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].

ii. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected ink manufacturing process is subject to the following:

a. Emissions from the affected ink manufacturing process shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Tanks H4 to H8	1.69	20.22

These limits are based on the maximum operating rates and maximum actual emission rates from the listed tanks.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 72120146, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.4.7 Testing Requirements

Upon request of the Illinois EPA or USEPA, the VOM emissions from an affected ink manufacturing process shall be determined in accordance with Reference Method 18, 25 or 25A, specified in 40 CFR 60 Appendix A, pursuant to 35 IAC 218.105. Use of an adaptation of these test methods may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. The Permittee must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified above will yield inaccurate results or are otherwise inappropriate and that the proposed adaptation is appropriate [35 IAC 218.105(f)].

7.4.8 Monitoring Requirements

In addition to the source wide monitoring requirements in Conditions 5.4.1 and 5.4.2, the Permittee shall perform the following monitoring procedures:

None

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected ink manufacturing process to

demonstrate compliance with Conditions 5.5.1 and 7.4.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)].
- b. Monthly and annual records of the following items for the affected ink manufacturing process:
 - i. Amount of ink and varnish production (ton/mo and ton/yr);
 - ii. VOM content for the ink and varnish production (weight percent);
 - iii. Total VOM emissions calculated based on the compliance procedures in Condition 7.4.12;
 - iv. MSDS of each solvent and any other VOM-containing raw material used;
 - v. Records of maximum process weight rate of raw materials (lb/hr); and
 - vi. Records of HAP emissions (ton/yr).

7.4.10 Reporting Requirements

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

- a. Report of Deviation
 - i. Report of any deviation from the applicable permit requirements of Section 7.4 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].
 - ii. Report of any violation of the requirements of 35 IAC 218 Subpart AA by sending a copy of any

record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation.

- b. At least 30 calendar days before changing the method of compliance for an affected ink manufacturing process, or the applicable emission determination method indicated in Condition 7.4.12, the permittee shall certify to the Illinois EPA that the affected ink manufacturing process will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such equipment and does not result in the emission of any specified air contaminant not previously emitted; and
- c. Physical relocation of equipment on-site.

7.4.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.4.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:

- i. Total VOM emissions from each affected ink manufacturing process = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.
- ii. VOM emissions from process operations (including solvent cleaning) and filter openings:

$$\text{VOM emissions} = \text{Production or Solvent Use (lb)} \times \text{VOM Content (\%VOM)} \times \text{Emission Factor (lb/lb VOM)}.$$
- iii. VOM emissions from process equipment leaks:

$$\text{VOM emissions} = \text{Charging Hours (hr)} \times \text{Emission Rate (lb/hr)}.$$
- b. Compliance with the PM emission limitations in Conditions 7.4.3(c) and 7.4.3(d) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected ink manufacturing process and associated control equipment.
- c. Compliance of the affected ink manufacturing process with the VOM emission limitation in Condition 7.4.3(e) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.5 Unit 07: Ball Mill Department

7.5.1 Description

The Ball Mill Department is a batch operation manufacturing ink. This production is done by milling solvents and pigments. Following milling, these inks are then filtered and packaged.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
08	8 Ball Mills (S-1 to S-8)	None

7.5.3 Applicable Regulations

a. An "affected ink manufacturing process" for the purpose of these unit-specific conditions, includes the emission units listed in Condition 7.5.2 used to produce various inks and varnishes.

b. The affected ink manufacturing process is subject to 35 IAC 218, Subpart AA: Paint and Ink Manufacturing, because the source has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate. These requirements are described in Conditions 5.4 and 7.5.5(a).

c. The affected ink manufacturing process is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 2) [35 IAC 212.322(a)].

d. The affected ink manufacturing process is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor

nuisance exists the limitation shall apply only to photochemically reactive material.

7.5.4 Non-Applicability of Regulations of Concern

The affected ink manufacturing process is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to a source's VOM emission units which are included within any of the categories specified in 35 IAC 218, Subpart AA [35 IAC 218.980(a)].

7.5.5 Operational Limits and Work Practices

The Permittee shall comply with the following requirements, in addition to the source wide requirements in Condition 5.4:

a. Open-top Mills, Tanks, Vats or Vessels

- i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a)].
- ii. The cover remains closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b)].
- iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c)].

b. Grinding Mills

- i. No person shall operate a grinding mill for the production of paint or ink which is not maintained in accordance with the manufacturer's specifications [35 IAC 218.625(a)].
- ii. No person shall operate a grinding mill fabricated or modified after the effective date of this Subpart which is not equipped

with fully enclosed screens [35 IAC 218.625(b)].

c. Clean Up Requirements

- i. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a)].
- ii. No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b)].

7.5.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.5.7 Testing Requirements

Upon request of the Illinois EPA or USEPA, the VOM emissions from an affected ink manufacturing process shall be determined in accordance with Reference Method 18, 25 or 25A, specified in 40 CFR 60 Appendix A, pursuant to 35 IAC 218.105. Use of an adaptation of these test methods may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. The Permittee must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified above will yield inaccurate results or are otherwise inappropriate and that the proposed adaptation is appropriate [35 IAC 218.105(f)].

7.5.8 Monitoring Requirements

In addition to the source wide monitoring requirements in Conditions 5.4.1 and 5.4.2, the Permittee shall perform the following monitoring procedures:

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected ink manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.5.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain all records necessary to demonstrate compliance with 35 IAC 218, Subpart AA at the source [35 IAC 218.637(b)].
- b. The manufacturer's specifications shall be kept on file at the plant by the owner or operator of the grinding mill and be made available to any person upon verbal or written request during business hours [35 IAC 218.625(c)].
- c. Monthly and annual records of the following items for the affected ink manufacturing process:
 - i. Amount of ink and varnish production (ton/mo and ton/yr);
 - ii. VOM content for the ink and varnish production (weight percent);
 - iii. Total VOM emissions calculated based on the compliance procedures in Condition 7.5.12;
 - iv. MSDS of each solvent and any other VOM-containing raw material used;
 - v. Records of maximum process weight rate of raw materials (lb/hr); and
 - vi. Records of HAP emissions (ton/yr).

7.5.10 Reporting Requirements

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

- a. Report of Deviation

- i. Report of any deviation from the applicable permit requirements of Section 7.5 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].
 - ii. Report of any violation of the requirements of 35 IAC 218 Subpart AA by sending a copy of any record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation.
- b. At least 30 calendar days before changing the method of compliance for an affected ink manufacturing process, or the applicable emission determination method indicated in Condition 7.5.12, the permittee shall certify to the Illinois EPA that the affected ink manufacturing process will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such equipment and does not result in the emission of any specified air contaminant not previously emitted; and
- c. Physical relocation of equipment on-site.

7.5.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.5.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:
- i. Total VOM emissions from each affected ink manufacturing process = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.
- ii. VOM emissions from process operations (including solvent cleaning) and filter openings:
- $$\text{VOM emissions} = \text{Production or Solvent Use (lb)} \times \text{VOM Content (\%VOM)} \times \text{Emission Factor (lb/lb VOM)}.$$
- iii. VOM emissions from process equipment leaks:
- $$\text{VOM emissions} = \text{Charging Hours (hr)} \times \text{Emission Rate (lb/hr)}.$$
- b. Compliance with the PM emission limitation in Condition 7.5.3(c) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected ink manufacturing process and associated control equipment.
- c. Compliance of the affected ink manufacturing process with the VOM emission limitation in Condition 7.5.3(d) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.6 Unit 08: Transfer Department

7.6.1 Description

In the Transfer Department, finished ink is repackaged from one package (tote, drum, or pail) to another package.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
09	Packaging	None

7.6.3 Applicability Provisions and Applicable Regulations

- a. An "affected emission unit" for the purpose of these unit-specific conditions, is a process used to distill cleaning solvent for recycling and disposal of materials.
- b. The affected emission unit is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive material.

7.6.4 Non-Applicability of Regulations of Concern

The affected emission unit is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.986 does not exceed 4.5 Mg (5.0 tons) per calendar year [35 IAC 218.980(d)].

7.6.5 Control Requirements

None

7.6.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.6.7 Operating Requirements

None

7.6.8 Inspection Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission unit to demonstrate compliance with Conditions 5.5.1 and 7.6.3(b), pursuant to Section 39.5(7)(b) of the Act:

- a. Amount of ink transferred (ton/yr);
- b. VOM content for the ink (weight percent);
- c. MSDS of each solvent and any other VOM-containing raw material used;
- d. Total VOM emissions calculated based on the compliance procedures in Condition 7.6.12 (ton/yr);

7.6.10 Reporting Requirements

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

a. Report of Deviation

Report of any deviation from the applicable permit requirements of Section 7.6 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.6.9 and by use of the formulae below and emission factors listed in Attachment 3 or by use of emission factors derived from a site specific emission factor if that emission factor was developed from stack test data and based on the worst case scenario:
- i. Total VOM emissions from each affected emission unit = the sum of VOM emissions from process operations, process equipment leaks, solvent cleaning, and filter openings.
- ii. VOM emissions from process operations (including solvent cleaning) and filter openings:
- $$\text{VOM emissions} = \text{Production or Solvent Use (lb)} \times \text{VOM Content (\%VOM)} \times \text{Emission Factor (lb/lb VOM)}.$$
- iii. VOM emissions from process equipment leaks:
- $$\text{VOM emissions} = \text{Charging Hours (hr)} \times \text{Emission Rate (lb/hr)}.$$
- b. Compliance of the affected emission unit with the VOM emission limitation in Condition 7.6.3(b) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

7.7 Unit 09: Still Department

7.7.1 Description

The distillation unit is a batch operation. Blending vessels, mills, filter screens and other equipment are routinely cleaned after production of an ink formulation. When the cleaning solution becomes too dirty to be used for further cleaning and cannot be incorporated in a compatible ink formulation, it is distilled. The distillate is recycled for cleaning and the still bottoms are disposed of as hazardous waste.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit Group	Description	Emission Control Equipment
10	Distillation Unit	None

7.7.3 Applicability Provisions and Applicable Regulations

- a. An "affected distillation unit" for the purpose of these unit-specific conditions, is a process used to distill cleaning solvent for recycling and disposal of materials.
- b. The affected distillation unit is subject to 35 IAC 218.301, 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 218.302 and with the following exception: if no odor nuisance exists the limitation shall apply only to photochemically reactive material.

7.7.4 Non-Applicability of Regulations of Concern

The affected distillation unit is not subject to 35 IAC 218, Subpart TT, because the requirements of 35 IAC 218, Subpart TT does not apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.986 does not exceed 4.5 Mg (5.0 tons) per calendar year [35 IAC 218.980(d)].

7.7.5 Control Requirements

None

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected distillation unit is subject to the following:

- a. Emissions from the affected distillation unit shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
Distillation Unit	0.20	2.43

These limits are based on the maximum operating rates and maximum actual emission rates from the listed unit.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 72120146, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.7.7 Operating Requirements

None

7.7.8 Inspection Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected distillation unit to demonstrate compliance with Conditions 5.5.1 and 7.7.3(b), pursuant to Section 39.5(7)(b) of the Act:

- a. Amount of cleaning solution distilled and reclaimed (lb/mo and lb/yr);

- b. Amount of still bottoms disposed as hazardous waste (lb/mo and lb/yr);
- c. Amount of reclaimed solvent (lb/mo and lb/yr);
- d. MSDS of each solvent distilled; and
- e. Total VOM emissions calculated based on the compliance procedures in Condition 7.7.12 (lb/mo and ton/yr).

7.7.10 Reporting Requirements

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

a. Report of Deviation

Report of any deviation from the applicable permit requirements of Section 7.7 shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes in raw materials and ink formulations, as long as such changes do not cause a violation of the emission limitations in Condition 5.5.1.
- b. Replacement of equipment or parts in kind or routine repair of equipment or parts, provided that the replacement or repair does not increase the amount of any specified air contaminant emitted by such

equipment and does not result in the emission of any specified air contaminant not previously emitted; and

- c. Physical relocation of equipment on-site.

7.7.12 Compliance Procedures

- a. Compliance with emission limitations in this section and Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.7.9 the emission calculation methodology described below:

- i. VOM Emissions from the affected distillation unit:

$$\begin{aligned} \text{Emission (lb)} = & \text{(Amount of cleaning solution} \\ & \text{put into the still, lb) -} \\ & \text{(Still bottoms, lb) -} \\ & \text{(Reclaimed solvent, lb)} \end{aligned}$$

- b. Compliance of the affected distillation unit with the VOM emission limitation in Condition 7.7.3(b) is assumed to be achieved by the work-practices inherent in the operation of the affected ink manufacturing process, so that no compliance procedures are set in this permit addressing this regulation.

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 August 27, 1999 (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 Program

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

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and 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:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. 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;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. 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 process, emissions, or composition parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the

Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

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

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

8.6.2 Test Notifications

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

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

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum:

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

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

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

- ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
1701 South 1st Avenue
Maywood, Illinois 60153

iii. Illinois EPA - Air Permit Section

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

iv. USEPA Region 5 - Air Branch

United States EPA (AR - 18J)
Air & Radiation Branch (Illinois - Indiana)
77 W. Jackson Boulevard
Chicago, Illinois 60604

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

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule. [Section 39.5(7)(j)(iv) of the Act]

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

- a. The provisions of Section 303 (emergency powers) of the Clean Air Act, 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 Clean Air Act; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents 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 [Section 39.5(7)(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
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

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)(0)(iv) of the Act]

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]

- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

9.12.2 Reopening and Revision

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

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

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit

application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 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: _____

10.2 Attachment 2: Particulate Matter Emissions from Process Emission Units

10.2.1 Section 212.321 - Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.

- a. Except as further provided in 35 IAC Part 212, 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 this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

P = Process weight rate; and
 E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

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

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 Ton/hr):

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

c. Limits for Process Emission Units For Which Construction of Modification Commenced On or After April 14,1972

Metric		English	
P <u>Mg/hr</u>	E <u>kg/hr</u>	P <u>Ton/hr</u>	E <u>lbs/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	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.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

10.2.2 Section 212.322 - Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

- a. Except as further provided in 35 IAC Part 212, 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 this Section.

- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

P = Process weight rate; and,
E = Allowable emission rate; and,

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

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

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

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

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

Metric		English	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>Ton/hr</u>	<u>lbs/hr</u>
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	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

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 - Emission Factors for Ink Manufacturing Lines

The following are VOM emission factors, as determined according to the procedures in Section 5.9.1.

Emission Unit	Emission Point	Emission Factor
01, 02	Cutter - Cold Cut	0.0132 lb/lb VOM
03	Cutter - Whites	0.0132 lb/lb VOM
04, 05	Media Mill	0.01537 lb/lb VOM
06, 07	Blending	0.0132 lb/lb VOM
08	Ball Mill	0.00364 lb/lb VOM
09	Transfers	0.0016 lb/lb VOM

JS:psj

I. INTRODUCTION

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

Sun Chemical Corporation - General Printing Ink Division operates a facility at 4910 South Monitor Avenue in Chicago, Illinois. This facility manufactures printing inks and varnishes. The ink and varnish manufacturing process involves solution manufacture, premixing or high speed dispersion, small media milling, blending, filtering, and packaging. Liquid materials used in ink and varnish manufacturing are received in drums or in bulk. Solvents used in large quantities are stored in aboveground or underground storage tanks and/or in portable tote tanks. Dry materials are received and stored in bags or drums.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit Group	Description	Date Constructed	Emission Control Equipment
Cutter Department - Cold Cut			
01	4 Mixing and Blending Vessels (H2, H3, H10, and H17)	Prior to 1970	None
02	5 Mixing and Blending Vessels (H11-15)	Prior To 1993	None
Cutter Department - Whites			
03	1 Mixing and Blending Vessel (H1)	Prior To 1988	None
Media Mill Department			
04	1 Mixing and Blending Vessel (H16)	Prior To 1988	Portable Dust Collector #1
05	3 Small Media Mills (N-1 to N-3)	Prior To 1993	None
Blending Department			
06	17 Mixing and Blending Vessels (H9A-H9Q)	Prior To 1970	Portable Dust Collector #2
07	5 Mixing and Blending Vessels (H4-8)	Prior To 1993	Portable Dust Collector #1
Ball Mill Department			
08	8 Ball Mills (S-1 to S-8)	Prior To 1970	None
Transfer Department			
09	Packaging	Prior To 1970	None
Still Department			
10	Distillation Unit	Prior To 1988	None

III. EMISSIONS

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

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	88.30
Sulfur Dioxide (SO ₂)	---
Particulate Matter (PM)	3.94
Nitrogen Oxides (NO _x)	---
HAP, not included in VOM or PM	---
TOTAL	92.24

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

IV. APPLICABLE EMISSION STANDARDS

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

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

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

V. PROPOSED PERMIT

CAAPP

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

Title I

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

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the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

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

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 164.

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