# *Statement of Basis*

for the DRAFT CAAPP Permit for:

**Source Name:**

**Brown Printing Company, Woodstock Division**

| | |
|---|---|
| Statement of Basis No.: | 99080050-1303 |
| I.D. No.: | 111095ABU |
| Permit No.: | 99080050 |
| Date Prepared: | March 22,2013 |

*Permitting Authority:*

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

This Statement of Basis is being provided to USEPA and any interested parties as required by Section 39.5(8)(b) of the Illinois Environmental Protection Act.

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## PREFACE

### Reason For This Document

This document is a requirement of the permitting authority in accordance with 502(a) of the Clean Air Act, 40 CFR 70.7(a)(5), and Section 39.5(8)(b) of the Illinois Environmental Protection Act. Section 39.5(8)(b) of the Illinois Environmental Protection Act states the following:

> "The Agency shall prepare a …… statement that sets forth the legal and factual basis for the Draft CAAPP permit conditions, including references to the applicable statutory or regulatory provisions."

### Purpose Of This Document

The purpose of this Statement of Basis is to provide discussion regarding the development of this Draft CAAPP Permit. This document would also provide the permitting authority, the public, the source, and the USEPA with the applicability and technical matters that form the basis of the Draft CAAPP Permit.

### Summary Of Historical Actions Leading Up To Today's Permitting Action

Since the last Renewal CAAPP Permit issued on November 8, 2002, the source has not been issued any modifications or amendments.

### Limitations

This Statement of Basis is not enforceable and only sets forth the legal and factual basis for the Draft CAAPP Permit Conditions (Chapters I and II). Chapter III contains supplemental material that would assist in educating interested parties about this source and the Draft CAAPP Permit. The Statement of Basis does not shield the source from enforcement actions or its responsibility to comply with existing or future applicable regulations. Nor does the Statement of Basis constitute a defense to a violation of the Federal Clean Air Act or the Illinois Environmental Protection Act including implementing regulations.

This document does not purport to establish policy or guidance.

## INTRODUCTION

The Clean Air Act Permit Program (CAAPP) is the operating permit program established in Illinois for major stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of the Illinois Environmental Protection Act. The Title V Permit Program (CAAPP) is the primary mechanism to apply the various air pollution control requirements established by the Clean Air Act to major sources, defined in accordance with Title V of the Clean Air Act. The Draft CAAPP Permit contains conditions identifying the state and federal applicable requirements that apply to the source. The Draft CAAPP Permit also establishes the necessary monitoring and compliance demonstrations. The source must implement this monitoring to demonstrate that the source is operating in accordance with the applicable requirements of the permit. The Draft CAAPP Permit identifies all applicable requirements for the various emission units as well as establishes detailed provisions for testing, monitoring, recordkeeping, and reporting to demonstrate compliance with the Clean Air Act. Further explanations of the specific provisions of the Draft CAAPP Permit are contained in the following Chapters of this Statement of Basis.

In addition, the Illinois EPA has committed substantial resources and effort in the development of an acceptable Statement of Basis (this document) that would meet the expectations of USEPA, Region 5. As a result, this document contains discussions that address applicability determinations, periodic monitoring, streamlining, prompt reporting, and SSM authorizations (as necessary). These discussions involve, where necessary, a brief description and justification for the resulting conditions and terms in this Draft CAAPP Permit. This document begins by discussing the legal basis for the contents of the Draft CAAPP Permit, moves into the factual description of the permit, and ends with supplemental information that has been provided to further assist with the understanding of the background and genesis of the permit content.

It is Illinois EPA's preliminary determination that this source's Permit Application meets the standards for issuance of a "Final" CAAPP Permit as stipulated in Section 39.5(10)(a) of the Illinois Environmental Protection Act (see Chapter I – Section 1.2 of this document). The Illinois EPA is therefore initiating the necessary procedural requirements to issue a Final CAAPP Permit. The Illinois EPA has posted the Draft CAAPP permit and this Statement of Basis on USEPA website:

http://www.epa.gov/reg5oair/permits/ilonline.html

## CHAPTER I – LEGAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

### 1.1 Legal Basis for Program

The Illinois EPA's state operating permit program for major sources established to meet the requirements of 40 CFR Part 70 are found at Section 39.5 of the Illinois Environmental Protection Act [415 ILCS 5/39.5]. The program is called the Clean Air Act Permitting Program (CAAPP). The underlying statutory authority is found in the Illinois Environmental Protection Act at 415 ILCS 5/39.5. The CAAPP was given final full approval by USEPA on December 4, 2001 (see 66 FR 62946).

### 1.2 Legal Basis for Issuance of CAAPP Permit

In accordance with Section 39.5(10)(a) of the Illinois Environmental Protection Act, the Illinois EPA may only issue a CAAPP Permit if all of the following standards for issuance have been met:

- The applicant has submitted a complete and certified application for a permit, permit modification, or permit renewal consistent with Sections 39.5(5) and (14) of the Illinois Environmental Protection Act, as applicable, and applicable regulations (Section a. below);

- The applicant has submitted with its complete application an approvable compliance plan, including a schedule for achieving compliance, consistent with Section 39.5(5) of the Illinois Environmental Protection Act and applicable regulations (Section b. below);

- The applicant has timely paid the fees required pursuant to Section 39.5(18) of the Illinois Environmental Protection Act and applicable regulations (Section c. below); and

- The applicant has provided any additional information as requested by the Illinois EPA (Section d. below).

#### a. Application Status

The source submitted an application for a Renewal CAAPP Permit on October 20 2006. The source is currently operating under an applicable shield resultant from a timely and complete renewal application submittal. This Draft CAAPP Permit addresses application content and necessary revisions to meet the requirements for issuance of the permit.

#### b. Present Compliance Status

At the time of this Draft CAAPP Permit, there were no pending State or Federal enforcement actions against the source; therefore, a Compliance Schedule is not required for this source. The source submitted an approvable Compliance Plan as part of its Certified Permit Application. The source has certified compliance with all applicable rules and regulations. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

#### c. Payment of Fees

The source is current on payment of all fees associated with operation of the emission units.

**d. Additional Information**

The source provided all the necessary additional application material as requested by the Illinois EPA.

## 1.3 Legal Basis for Conditions in the CAAPP Permit

This industrial source is subject to a variety of Federal and SIP regulations, which are the legal basis for the conditions in this permit (see Sections a. and b. below). Also, the CAAPP provides the legal basis for additional requirements such as periodic monitoring, reporting, and recordkeeping. The following list summarizes those regulations that form the legal basis for the conditions in this Draft CAAPP Permit and are provided in the permit itself as the origin and authority.

**a. Applicable Federal Regulations**

This source operates emission units that are subject to Federal regulations.

40 CFR 64 Compliance Assurance Monitoring (CAM)

**b. Applicable SIP Regulations**

This source operates emission units that are subject to the following SIP regulations:

35 IAC Part 201 - Permits And General Provisions
35 IAC Part 203 - Major Stationary Sources Construction And Modification
35 IAC Part 205 - Emissions Reduction Market System
35 IAC Part 212 – Visible And Particulate Matter Emissions
35 IAC Part 218 – Organic Material Emis Stnds And Lmtns For The Chicago Area
35 IAC Part 228 – Asbestos
35 IAC Part 254 – Annual Emissions Report
35 IAC Part 266 - Interpretation Of The Definition Of Process Weight Rate

**c. Other Applicable Requirements**

The source also has several applicable requirements that are based on SIP approved permits, which are listed and identified in Chapter II Section 2.8.

## CHAPTER II – FACTUAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

### 2.1 Source History

There is no significant source history warranting discussion for this source

### 2.2 Description of Source

SIC Code: 2752
County: McHenry

The source 48 Inkjet printing cabinets and seven Heatset Web Offset Lithographic Printing Presses with Natural Gas Dryers. In addition, the seven Heatset Web Offset Lithographic Printing Pressed Dryers emissions are controlled with three Regenerative Thermal Oxidizer (RTO).

Woodstock is an area that is designated nonattainment for ozone. This project was subject to 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), because the potential emissions of volatile organic material (VOM) exceeded 25 tons/year.

The source contains the following processes:

| *Emission Units* | *Description* |
|---|---|
| #1-#48<br>Inkjet printing cabinets | Inkjet printing cabinets are used in the Bindery Department where printed material produced elsewhere at the plant is assembled and bound. The cabinets are computer controlled to print the name and address of the recipient and other personalized information in individual magazines. The inkjet printing cabinets do not utilize any emission control equipment. |
| #4110, #4120, #4170, #4130, #4140, #4150, & #4190 Heatset Web Offset Lithographic Printing Press with Natural Gas Fired Dryers and emissions controlled by three Regenerative Thermal Oxidizer (RTO). | The heatset web offset lithographic printing presses are used to print magazine forms to be bound into trade magazines. The presses use the heatset web offset lithographic printing process to transfer inked images from the plate to the impression roller then onto the paper with the aid of fountain solutions. The inked paper then passes through a dryer and 80% of the ink solvent is flashed off by the heat. The flashed off ink solvent is then transported to the RTOs and oxidized. Part of the fountain solution and automatic blanket wash solvent emissions are also captured by the dryer and controlled by the RTOs. All press dryer VOM emissions are funneled into a common duct and then split into RTO-1, RTO-2, or RTO-3, depending on airflow. Each heatset web offset lithographic printing press dryer and each RTO burn natural gas as the fuel. Emissions of $NO_x$, CO, PM, and $SO_2$ result from the combustion of natural gas in the press dryers and the RTOs. |

## 2.3 Single Source Status

This source does not have any collocated facilities that would be considered a single source with this facility based on information found in the certified application.

## 2.4 Ambient Air Quality Status for the Area

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone moderate and $PM_{2.5}$ and attainment or unclassifiable for all other criteria pollutants carbon monoxide, lead, nitrogen dioxide, $PM_{10}$, and sulfur dioxide. (See 40 CFR Part 81 - Designation of Areas for Air Quality Planning Purposes)

## 2.5 Source Status

The source requires a CAAPP permit because this source is considered major (based on its PTE) for the following regulated pollutants: volatile organic material (VOM) and hazardous air pollutant (HAP)

Based on available data, this source is not a major source of emissions for GHG, because the estimated potential emissions of GHG that are less than 100 tons per year (mass) and 100,000 tons per year ($CO_2e$). Brown Printing Company, Woodstock Division submitted data in its application for which the Illinois EPA estimated the PTE of GHG emissions to be 50,530 tons per year. The emissions consist of 50,481 tons of $CO_2$, 29.45 tons of $N_2O$, and 19.95 tons of methane.

This source is not currently subject to any “applicable requirements,” as defined by Section 39.5(1) of the Act, for emissions of greenhouse gases (GHG) as defined by 40 CFR 86.1818-12(a), as referenced by 40 CFR 52.21(b)(49)(i). There are no GHG-related requirements under the Illinois Environmental Protection Act, Illinois’ State Implementation Plan, or the Clean Air Act that apply to this facility, including terms or conditions in a Construction Permit addressing emissions of GHG or BACT for emissions of GHG from a major project at this facility under the PSD rules. In particular, the USEPA’s Mandatory Reporting Rule for GHG emissions, 40 CFR Part 98, does not constitute an “applicable requirement” because it was adopted under the authority of Sections 114(a)(1) and 208 of the Clean Air Act. This permit also does not relieve the Permittee from the legal obligation to comply with the relevant provisions of the Mandatory Reporting Rule for this facility.

## 2.6 Annual Emissions

The following table lists annual emissions (tons) of criteria pollutants for this source, as reported in the Annual Emission Reports (AER) sent to the Illinois EPA:

| *Pollutant* | *2011* | *2010* | *2009* | *2008* | *2007* |
|---|---|---|---|---|---|
| CO | 7.45 | 7.62 | 7.16 | 7.70 | 6.75 |
| $NO_x$ | 0.20 | 0.20 | 0.20 | 0.20 | 0.11 |
| PM | 0.67 | 0.69 | 0.65 | 0.70 | 0.61 |
| $SO_2$ | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 |
| VOM | 77.2 | 63.0 | 53.7 | 67.2 | 54.1 |
| $CO_{2E}$ | 10,649 | 10,880 | 10,228 | 11,004 | 5,990 |
| HAP | 0 | 0 | 0 | 0 | 0 |

## 2.7 Fee Schedule

The following table lists the approved annual fee schedule (tons) submitted in the Source's permit application:

An annual fee schedule (tons) is not set for this source for the purpose of permit fees as the source is paying the maximum fee at the time of issuance of the permit.

| *Pollutant* | | *Tons/Year* |
|---|---|---|
| Volatile Organic Material | (VOM) | 87.85 |
| Sulfur Dioxide | ($SO_2$) | 0.13 |
| Particulate Matter | (PM) | 1.65 |
| Nitrogen Oxides | ($NO_x$) | 21.23 |
| HAP, not included in VOM or | (HAP) | 0.00 |
| Total | | 110.86 |

## 2.8 SIP Permit Facts (T1 Limits)

CAAPP Permits must address all "applicable requirements," which includes the terms and conditions of preconstruction permits issued under regulations approved by USEPA in accordance with Title I of the CAA (*See* definition of applicable requirements in Section 39.5(1) of the Illinois Environmental Protection Act). Preconstruction permits, commonly referred to in Illinois as Construction Permits, derive from the New Source Review ("NSR") permit programs required by Title I of the CAA. These programs include the two major NSR permit programs: (1) the Prevention of Significant Deterioration ("PSD") program[1] and (2) the nonattainment NSR program.[2] These programs also encompass state construction permit programs for projects that are not major.

In the CAAPP or Illinois's Title V permit program, the Illinois EPA's practice is to identify requirements that are carried over from an earlier Title I permit into a New or Renewed CAAPP Permit as "TI" conditions (i.e., Title I conditions). Title I Conditions that are revised as part of their incorporation into a CAAPP Permit are further designated as "TIR." Title I Conditions that are newly established through a CAAPP Permit are designated as "TIN." It is important that Title I Conditions be identified in a CAAPP Permit because these conditions will not expire when the CAAPP Permit expires. Because the underlying authority for Title I Conditions comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than being linked to Title V of the A. For "changes" to be made to Title I Conditions, they must either cease to be applicable based on obvious circumstances, e.g., the subject emission unit is permanently shut down, or appropriate Title I procedures must be followed to change the conditions.

- Previously Incorporated Construction Permits:

| *Permit No.* | *Date Issued* | *Subject* |
|---|---|---|
| 02010046 | 11/13/2002 | REGENERATIVE THERMAL OXIDIZER AND COATING UNIT |
| 02040102 | 7/18/2002 | 16 INKJET CABINETS |
| 97080012 | 3/15/2004 | HEATSET WEB OFFSET LITHOGRAPHIC PRINTING PRESSES |

- Newly Issued Construction Permits:

| *Permit No.* | *Date Issued* | *Subject* |
|---|---|---|
| 07070061 | 6/16/2009 | PRESS #4190 |
| 13020027 | 03/04/2013 | Modified Printing Lines |

- The following table lists the T1R Limits issued by the Illinois EPA and require incorporation into the CAAPP Permit prior to the proposal and issuance of this Draft CAAPP Permit.

| *T1 Type* | *Condition* | *Subject* |
|---|---|---|
| T1R | Section 4.2 Condition 4.2.2(d)(A) | Combine Permit #99080050 and Construction Permits #07070061 and #0201004, the VOM emissions from Offset Presses #4110, #4120, #4170, #4130, #4140, #4150, and #4190, other than the VOM attributable to the press dryers and associated RTOs, in total, shall not exceed 9.6 tons/mo and 60.81 tons/yr |
| T1R | Section 4.2 Condition 4.2.2(i)(e)(A) | Combine Construction Permits #97080012 ,#07070061 and #02010046, the CO emissions from the combustion of natural gas in the press dryers on the offset presses #4110, #4120, #4170, #4130, #4140, #4150, and #4190 and associated RTOs, in total, shall not exceed 2.17 tons/mo and 17.32 tons/year. |
| T1R | Section 4.2 Condition 4.2.2(f)(i)(A) | Combine Construction Permits #97080012, #07070061 and #02010046, the $NO_x$ emissions from the combustion of natural gas in the press dryers on the offset presses #4110,#4120, #4170, #4130, #4140, #4150, and #4190 and associated RTOs, in total, shall not exceed 6.3 tons/mo and 50.34 tons/year. |

## CHAPTER III – SUPPLEMENTAL DISCUSSIONS REGARDING THE PERMIT

The information provided in this Chapter of the Statement of Basis is being provided to assist interested parties in understanding what additional information may have been relied on to support this draft CAAPP permit.

### 3.1 Environmental Justice Discussions

This location has not been identified as a potential concern for Environmental Justice consideration.

### 3.2 Emission Testing Results

The source has performed the following emission testing:

| ARI Environmental , Inc. Test Date: October 20,2008 | | | | | | |
|---|---|---|---|---|---|---|
| VOM (DRE) Destruction Efficiency Table | | | | | | |
| Date: | 10/20/2008 | 10/20/2008 | 10/20/2008 | | | |
| Start<br>End Time: | 9:15 -<br>10:15 | 11:10-<br>13:06 | 14:21-<br>15:21 | | | |
| | Run-1 | Run-2 | Run-3 | Average | Comments | |
| RTO-1 | 98.6% | 98.9% | 98.9% | 98.8% | Well within 98% LAER | |
| RTO-2 | 99.6% | 98.8% | 99.4% | 99.3% | Well within 98% LAER | |
| RTO-3 | 99.2% | 98.4% | 98.9% | 98.9% | Well within 98% LAER | |
| | | | | | | |

| Combustion Chamber Time and Temperature Table:10/20/2008 | | | | | |
|---|---|---|---|---|---|
| RTO-1 | | RTO-2 | | RTO-3 | |
| Time | °F | Time | °F | Time | °F |
| 20:30 | 1519 | 21:00 | 1513 | 20:00 | 1528 |
| 19:00 | 1510 | 19:30 | 1517 | 16:00 | 1520 |
| 17:30 | 1522 | 18:00 | 1515 | 12:00 | 1518 |
| 16:00 | 1509 | 17:00 | 1516 | 8:00 | 1524 |
| 15:00 | 1523 | 15:30 | 1506 | 4:00 | 1513 |
| 13:30 | 1507 | 14:00 | 1521 | 0:00 | 1523 |
| 12:00 | 1500 | 12:30 | 1513 | | |
| 10:30 | 1508 | 11:00 | 1519 | | |
| 9:00 | 1498 | 9:30 | 1479 | | |
| 7:30 | 1509 | 8:30 | 1519 | | |
| 6:30 | 1520 | 7:00 | 1511 | | |
| 5:00 | 1519 | 5:30 | 1513 | | |
| 3:30 | 1501 | 4:00 | 1516 | | |
| 2:00 | 1504 | | | | |

Condition 4.2.2(g)(i)(B) requires chamber temperature of 1500°F and 98% destruction.

### 3.3 Compliance Reports (Annual Certifications, Semiannual Monitoring, NESHAP, etc.)

A review of the source's compliance reports demonstrates the sources ability to comply with all applicable requirements.

### 3.4 Field Inspection Results

A review of the source's latest field inspection May 19,2010 report demonstrates the source's ability to comply with all applicable requirements.

### 3.5 Historical Non-Compliance

Brown Printing has a Violation Notice (A-2012-00066) Mailed June 22, 2012 for exceeding offset presses #4110, #4120, #4170, #4130, #4140, and #4150, 34.99 tons/year of VOM, CAA proposed 10/10/2012, CCA accepted 11/01/2012.

### 3.6 Source Wide Justifications and Rationale

| Applicable Requirements Summary | | |
|---|---|---|
| Applicable Requirement | Type | Location |
| Fugitive Particulate Matter (35 IAC 212.301 and 35 IAC 212.314) | Applicable Standard | See the Permit, Condition 3.1(a) |
| VOM Requirement, Emissions Reduction Market System (ERMS) (35 IAC Part 205) | Applicable Standard | See the Permit, Condition 3.1(b) |

**Particulate Matter Emission**

- Monitoring as follows (Condition 3.1(a)(ii))
  - If required, daily observation for a week for PM emissions.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Source has not exhibited a history of non-compliance.

Monitoring is consistent with other sources in this source category.

**Non-Applicability Discussion**

Complex source-wide non-applicability determinations were not made for this source.

**Prompt Reporting Discussion**

Prompt reporting of deviations for source wide emission units has been established as 30 days. See rationale in Chapter III Section 3.9.

## 3.7 Emission Unit Justifications and Rationale

| **a. Inkjet Printing Cabinets** | | |
|---|---|---|
| **Applicable Requirements Summary** | | |
| Applicable Requirement | Type | Location |
| Opacity Requirement (35 IAC 212.123) | Applicable Standard | See the Permit, Condition 4.1.2(a) |
| PM Requirement (35 IAC 212.321) | Applicable Standard | See the Permit, Condition 4.1.2(b) |
| VOM Requirement (35 IAC 218.301)) | Applicable Limits | See the Permit, Condition 4.1.2(c)(i)(A) |
| VOM Requirement (#99080050)) | Applicable Limits | See the Permit, Condition 4.1.2(c)(i)(B)(C) |
| VOM Requirement (CP #97080012 and CP #02040102)) | Applicable Limits | See the Permit Condition 4.1.2(d)(i)(A) |
| Operational and Production Requirements | Applicable Work Practice | See permit , Condition 4.1.2(d)(i)(A) |

**Visible Emissions (i.e., Opacity)**

- Monitoring as follows (Condition 4.1.2(a)(ii)(A))
  - Annual Method 22 observations
  - If required, Method 9 measurements

- Recordkeeping as follows (Condition 4.1.2(a)(ii)(B) and (C)):
  - Records of each Method 22 observation
  - If required, records of each Method 9 measurement

- Reporting as follows (Condition 4.1.5):
  - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for emission units.

**Particulate Matter Emission**

- Recordkeeping as follows (Condition 4.1.2(b)(ii)(A)):
  - A file containing the solids content of the ink with supporting documentation.

- Reporting as follows (Condition 4.1.5):
  - Prompt reporting within 30 days.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Monitoring is consistent with other sources in this source category.

**Volatile Organic Material Emission**

- Monitoring as follows (Condition 4.1.2 (c)(ii)(B))
  - The volatile organic material of the inks, cleaning solution and other VOM containing materials shall be determined on an annual basis by Method 24, 40 CFR Part 60, Appendix A.
  - The manufacturer's specifications for VOM content for each material may be used if such manufacturer's specifications are based on results of tests of VOM content conducted in accordance with methods specified in 35 IAC 218.105(a); provided, however, Method 24, 40 CFR Part 60, Appendix A, shall be used to determine compliance

- Recordkeeping as follows (Condition 4.1.2(c)(ii)(C),and 4.1.2(d)(ii)(B)
  - The amount of each material used (lbs or gallons/month and lbs or gallons/year);
  - The VOM content of each material used (percent by weight or lbs per gallon);
  - The number of inkjet printing cabinets in operation each month;
  - The average monthly VOM emissions, based on the usage and VOM content of each material used, the number of inkjet printing cabinets in operation each month; and
  - The monthly and annual aggregate VOM emissions, based on the usage and VOM content of each material used and with supporting calculations (tons/month and tons/year)

- Reporting as follows (Condition Condition 4.1.5):
  - Prompt reporting of deviations within 30 days.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Source utilizes low VOM content inks.
- The use of Method 24 is sufficient to demonstrate compliance. It should be noted that the source is also required to maintain inspection records, and maintain maintenance and repair logs of the printing lines. These records would help the Illinois EPA determine if the printing lines are operated properly and therefore would result in VOM being minimized.

Operation and Production

- Monitoring as follows (Condition 4.1.2(d)(ii)(A)
- Shall on an annual basis either perform testing of the VOM composite partial vapor pressure of each material in accordance with the applicable methods and procedures specified in 35 IAC 218.110 or maintain the information on the VOM composite vapor pressure provided by supplier.
- Recordkeeping as follows
- The name and identification of each material used; and

- The VOM composite partial vapor pressure of each material used, as determined in accordance with the testing requirements or supplier certification.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Source utilizes low VOM content inks.

**Non-Applicability Discussion**

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

**Prompt Reporting Discussion**

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 9.

| **b. Heatset Web Offset Lithographic Printing Presses** | | |
|---|---|---|
| **Applicable Requirements Summary** | | |
| Applicable Requirement | Type | Location |
| Opacity Requirement (35 IAC 212.123) | Applicable Standard | See the Permit, Condition 4.2.2(a)(i)(A) |
| PM Requirement (35 IAC 212.321(a)) | Applicable Limits | See the Permit, Condition 4.2.2(b(i)(A)) |
| $SO_2$ Requirement (35 IAC 214.301) | Applicable Limits | See the Permit, Condition 4.2.2(c)(i)(A) |
| VOM Requirement (35 IAC 218.407) | Applicable Limits | See permit , Condition 4.2.2(d)(i)(F)&(H) |
| VOM Requirement Permits #97080012,#99080050,#07070061[T1R] | Applicable Limits | See Permit Condition 4.2.2(i)(A)(B)(C)(D)(E)(G) |
| CO Requirement Permits #97080012,#07070061,#02010046[T1R] | Applicable Limits | See Permit Requirement Condition 4.2.2(e)(i)(A) |
| $NO_x$ Requirement Permits #97080012,#07070061,#02010046[T1R] | Applicable Limits | See Permit Requirement Condition 4.2.2(f)(i)(A) |
| Operation and Production | Applicable Standard | See Permit Condition 4.2.2(g)(i)(A)-(C) |
| Work Practice | Applicable Standard | See Permit Requirement Condition 4.2.2(h)(i)(A)(B) |

**Visible Emissions (i.e., Opacity)**

- Monitoring as follows (Condition 4.2.2(a)(ii)(A))
  - Annual Method 22 observations
  - If required, Method 9 measurements
  - Annual Inspections

- Recordkeeping as follows (Condition 4.2.2(a)(ii)(B) and (C)):
  - Records of each Method 22 observation
  - If required, records of each Method 9 measurement
  - Records of each inspection

- Reporting as follows (Condition 4.2.5):
  - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for emission units that combust natural gas. The likelihood of natural gas printing line dryers violating opacity is small. It should be noted that the source is also required to maintain the type of fuel used, maintain inspection records, and maintain maintenance and repair logs of the natural gas printing lines dryers. These records would help the Illinois EPA determine if the natural gas printing line dryers are being operated properly and therefore would result in opacity being minimized. Because these printing line dryers use pipeline quality natural gas with low PM content and coupled with the monthly inspections, efficiency is maintained reducing the likelihood of visible emissions.

**Particulate Matter Emission**

- Recordkeeping as follows (Condition 4.2.2(b)(ii)(A)):
  - The method to determine emissions of PM, with supporting documentation.
  - The emissions of PM from the printing presses, lbs/month and tons/year (12 month rolling average), with supporting calculations.

- Reporting as follows (Condition 4.2.5):
  - Prompt reporting within 30 days.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Monitoring is consistent with other sources in this source category. The likelihood of a printing line and dryers violating the PM limit is unlikely. The use of pipeline quality natural gas is sufficient to demonstrate compliance. It should be noted that the source is also required to maintain the type of fuel used, maintain inspection records, and maintain maintenance and repair logs of the printing lines and dryers. These records would help the Illinois EPA determine if the printing lines and dryers are operated properly and therefore would result in PM being minimized.

**Sulfur Emissions**

- Monitoring as follows (Condition 4.2.2(h)(ii)(A))
  - Pipeline quality natural gas only as fuel

- Recordkeeping as follows (Condition 4.2.2(h)(ii):
  - The natural gas quality is equal to pipeline quality natural gas.

- Reporting as follows (Condition 4.2.5):
  - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

**Volatile Organic Material Emission**

- Monitoring as follows (Condition 4.2.2(d)(ii)(A) through (O))
  - Continuously monitor temperature and VOM content of fountain solution
  - Test to determine VOM concentration or VOM composite partial vapor pressure of the cleaning solution

- Recordkeeping as follows (Condition 4.2.2(d)(ii)(P) through (Q):

  Fountain solution

  - Date, time, name and identification of each batch
  - Identification of printing presses which uses fountain solution
  - VOM content limits
  - Documentation of calibration of automatic feed equipment
  - Temperature and maintain log of temperature monitoring device

  Cleaning solvent

  - Name and identification
  - Date and time of preparation
  - Molecular weight, density, and VOM composite partial vapor pressure
  - Total amount of each cleaning solvent or VOM content

- Reporting as follows (Condition 4.2.5):
  - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- Presumed as the source is subject to CAM.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

**Carbon Monoxide Emissions**

- Monitoring as follows (Condition 4.2.2(e)(ii)(A))
- Annual CO limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).
- Recordkeeping as follows (Condition 4.2.2(e)(ii)(B)
- Monthly and annual emissions of CO (tons/month and tons/year), with supporting calculations.
- Reporting as follows (Condition 4.2.5):
    - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

**Nitrogen Oxides Emissions**

- Monitoring as follows (Condition 4.2.2(f)(ii)(A)
- Annual $NO_x$ limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total)
- Recordkeeping as follows (Condition 4.1.2(f)(ii)(B)
- Monthly and annual emissions of $NO_x$ (tons/month and tons/year), with supporting calculations.
- Reporting as follows (Condition 4.1.5):
    - Prompt reporting within 30 days

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

**Operation and Production**

- **Monitoring as follows (Condition 4.2.2(g)(ii)(A)-(D)**
- Calibrate, maintain, and operate temperature monitoring device(s)
- Compliance Assurance Monitoring (CAM) for Major Stationary Sources, the press dryers and their associated RTOs
- Inspections of the RTOs at least every 12 months
- Testing every 60 month RTO destruction efficiency
- Recordkeeping as follows (Condition 4.1.2(g)(ii)(E)-(G)
- Collect and record daily information for each afterburner
- Records of each inspection performed along with a maintenance and repair log.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- o There is a small likelihood of an exceedance.
- o Emissions do not vary significantly under normal operation and/or vary slowly with time.
- o Source has not exhibited a history of non-compliance.

Monitoring is consistent with other sources in this source category.

**Work Practice**

- o Recordkeeping as follows (Condition 4.1.2(h)(ii)(A)
- o Records that the natural gas quality is equal to pipeline quality natural gas.

**Rationale and Justification for Periodic Monitoring**

Periodic Monitoring is sufficient for these emission units because:

- o There is a small likelihood of an exceedance.
- o Emissions do not vary significantly under normal operation and/or vary slowly with time.
- o Source has not exhibited a history of non-compliance.

Monitoring is consistent with other sources in this source category.

**Non-Applicability Discussion**

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

**Prompt Reporting Discussion**

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 9.

## 3.8 Insignificant Activities Discussion

There are no insignificant activities for the source subject to specific regulations which are obligated to comply with Sections 9.1(d) and Section 39.5 of the Act; Sections 165, 173, and 502 of the Clean Air Act; or any other applicable permit or registration requirements and therefore there are no periodic monitoring requirements that need to be separately addressed.

## 3.9 Prompt Reporting Discussion

Among other terms and conditions, CAAPP Permits contain reporting obligations to assure compliance with applicable requirements. These reporting obligations are generally four-fold. More specifically, each CAAPP Permit sets forth any reporting requirements specified by state or federal law or regulation, requires prompt reports of deviations from applicable requirements, requires reports of deviations from required monitoring and requires a report certifying the status of compliance with terms and conditions of the CAAPP Permit over the calendar year.

The number and frequency of reporting obligations in any CAAPP Permit is source-specific. That is, the reporting obligations are directly related to factors, including the number and type of emission units and applicable requirements, the complexity of the source and the compliance status. This four-fold approach to reporting is common to virtually all CAAPP Permits as described below. Moreover, this is the approach established in the Draft CAAPP Permit for this source.

**Regulatory Reports**

Many state and federal environmental regulations establish reporting obligations. These obligations vary from rule-to-rule and thus from CAAPP source to CAAPP source and from CAAPP Permit to CAAPP Permit. The variation is found in the report triggering events, reporting period, reporting frequency and reporting content. Regardless, the CAAPP makes clear that all reports established under applicable regulations shall be carried forward into the CAAPP Permit as stated in Section 39.5(7)(b) of the Illinois Environmental Protection Act. Generally, where sufficiently detailed to meet the exacting standards of the CAAPP, the regulatory reporting requirements are simply restated in the CAAPP Permit. Depending on the regulatory obligations, these regulatory reports may also constitute a deviation report as described below.

The Draft CAAPP Permit for this source would embody all regulatory reporting as promulgated under federal and state regulations under the Clean Air Act and the Illinois Environmental Protection Act. Depending on the frequency of the report, the regulatory report may also satisfy the prompt reporting obligations discussed below. These reports must be certified by a responsible official.

These reports are generally found in the reporting sections for each emission unit group. The various regulatory reporting requirements are summarized in the table at the end of this Reporting Section.

**Deviation Reports (Prompt Reporting)**

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require prompt reporting of deviations from the permit requirements.

Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term “prompt”. Rather, 40 CFR Part 70.6(a)(3)(iii)(B) intended that the term have flexibility in application. The USEPA has acknowledged for purposes of administrative efficiency and clarity that the permitting authority (in this case, Illinois EPA) has the discretion to define “prompt” in relation to the degree and type of deviation likely to occur at a particular source. The Illinois EPA follows this approach and defines prompt reporting on a permit-by-permit basis. In instances where the underlying applicable requirement contains “prompt” reporting, the Illinois EPA typically incorporates the pre-established timeframe in the CAAPP permit (e.g. a NESHAP or NSPS deviation report). Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA generally uses a timeframe of 30 days to define prompt reporting of deviations.

This approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. The reporting arrangement is designed so that the source will appropriately notify

the Illinois EPA of those events that might warrant attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time to conduct a thorough investigation into the causes of an event, collecting any necessary data, and developing preventive measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation, while at the same time affording regulatory authority and the public timely and relevant information. The approach also affords the Illinois EPA and USEPA an opportunity to direct investigation and follow-up activities, and to make compliance and enforcement decisions in a timely fashion.

The Draft CAAPP Permit for this source would require prompt reporting as required by the Illinois Environmental Protection Act in the fashion described in this subsection. In addition, pursuant to Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, this Draft CAAPP Permit would also require the source to provide a summary of all deviations with the Semi-Annual Monitoring Report. These reports must be certified by a responsible official, and are generally found in the reporting sections for each emission unit group.

**Semi-Annual Monitoring Reports**

Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a report relative to monitoring obligations as set forth in the permit. Depending upon the monitoring obligation at issue, the semi-annual monitoring report may also constitute a deviation report as previously discussed. This monitoring at issue includes instrumental and non-instrumental emissions monitoring, emissions analyses, and emissions testing established by state or federal laws or regulations or as established in the CAAPP Permit. This monitoring also includes recordkeeping. Each deviation from each monitoring requirement must be identified in the relevant semi-annual report. These reports provide a timely opportunity to assess for compliance patterns of concern. The semi-annual reports shall be submitted regardless of any deviation events. Reporting periods for semi-annual monitoring reports are January 1 through June 30 and July 1 through December 31 of each calendar year. Each semi-annual report is due within 30 days after the close of reporting period. The reports shall be certified by a responsible official. The Draft CAAPP Permit for this source would require such reports at Condition 3.5(b).

**Annual Compliance Certifications**

Section 39.5(7)(p)(v) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a source to submit a certification of its compliance status with each term and condition of its CAAPP Permit. The reports afford a broad assessment of a CAAPP sources compliance status. The CAAPP requires that this report be submitted, regardless of compliance status, on an annual basis. Each CAAPP Permit requires this annual certification be submitted by May 1 of the year immediately following the calendar year reporting period. The report shall be certified by a responsible official. The Daft CAAPP Permit for this source would require such a report at Condition 2.6(a).

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA, and the public rely on timely and accurate reports submitted by the source to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence

of the source's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this Draft CAAPP Permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute a deviation from an emission limitation or standard or the like, as necessary and appropriate.

As a result, the Illinois EPA's approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention.

## 3.10 Emissions Reduction Market System (ERMS)

The Emissions Reduction Market System (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. 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 in 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 shall 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).

### 3.11 Periodic Monitoring General Discussions

Pursuant to Section 504(c) of the Clean Air Act, a Title V permit must set forth monitoring requirements, commonly referred to as "Periodic Monitoring," to assure compliance with the terms and conditions of the permit. A general discussion of Periodic Monitoring is provided below. The Periodic Monitoring that is proposed for specific operations and emission units and at this source is discussed in Chapter III of this Statement of Basis. Chapter III provides a narrative discussion of and justification for the elements of Periodic Monitoring that would apply to the different emission units and types of emission units at the facility.

As a general matter, the required content of a CAAPP Permit with respect to such Periodic Monitoring is addressed in Section 39.5(7) of the Illinois Environmental Protection Act.[3] Section 39.5(7)(b) of the Illinois Environmental Protection Act[4] provides that in a CAAPP Permit:

> The Agency shall include among such conditions applicable monitoring, reporting, record keeping and compliance certification requirements, as authorized by paragraphs d, e, and f of this subsection, that the Agency deems necessary to assure compliance with the Clean Air Act, the regulations promulgated thereunder, this Act, and applicable Board regulations. When monitoring, reporting, record keeping and compliance certification requirements are specified within the Clean Air Act, regulations promulgated thereunder, this Act, or applicable regulations, such requirements shall be included within the CAAPP Permit.

Section 39.5(7)(d)(ii) of the Illinois Environmental Protection Act further provides that a CAAPP Permit shall:

> Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), require Periodic Monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit …

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirement in relevant Title 1 permits are not accompanied by compliance procedures, it is necessary for Monitoring for these standards, requirements or limits to be established in a CAAPP Permit.[5, 6] Monitoring requirements must also be established when standards and control requirement are accompanied by compliance procedures but those procedures are not adequate to assure compliance with the applicable standards or requirements.[7, 8] For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive

requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements, must be determined by the permitting authority based on its knowledge, experience and judgment.[9] For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for most emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

The Periodic Monitoring for an emission unit may also include measures, such as emission testing, that would only be required once or only upon specific request by the Illinois EPA. These requirements would always be accompanied by Monitoring requirements would apply on a regular basis. When emission testing or other measure is only required upon request by the Illinois EPA, it is included as part of the Periodic Monitoring for an emission unit to facilitate a response by the Illinois EPA to circumstances that were not contemplated when Monitoring was being established, such as the handling of a new material or a new mode of operation. Such Monitoring would also serve to provide further verification of compliance, along with other potentially useful information. As emission testing provides a quantitative determination of compliance, it would also provide a determination of the margin of compliance with the applicable limit(s) and serve to confirm that the Monitoring required for an emission unit on a regular basis is reliable and appropriate. Such testing might also identify specific values of operating parameters of a unit or its associated control equipment that accompany compliance and can be relied upon as part of regular Monitoring.

There are a number of considerations or factors that are or may be relevant when evaluating the need to establish new monitoring requirements as part of the Periodic Monitoring for an emission unit. These factors include: (1) The nature of the emission unit or process and its emissions; (2) The variability in the operation and the emissions of the unit or process over time; (3) The use of add-on air pollution control equipment or other practices to control

emissions and comply with the applicable substantive requirement(s); (4) The nature of that control equipment or those control practices and the potential for variability in their effectiveness; (5) The nature of the applicable substantive requirement(s) for which Periodic Monitoring is needed; (6) The nature of the compliance procedures that specifically accompany the applicable requirements; (7) The type of data that would already be available for the unit; (8) The effort needed to comply with the applicable requirements and the expected margin of compliance; (9) The likelihood of a violation of applicable requirements; (10) The nature of the Periodic Monitoring that may be readily implemented for the emission unit; (11) The extent to which such Periodic Monitoring would directly address the applicable requirements; (12) The nature of Periodic Monitoring commonly required for similar emission units at other facilities and in similar circumstances; (13) The interaction or relationship between the different measures in the Periodic Monitoring for an emission unit; and (14) The feasibility and reasonableness of requiring additional measures in the Periodic Monitoring for an emission unit in light of other relevant considerations.[10]

## CHAPTER IV - CHANGES FROM PREVIOUSLY ISSUED CAAPP PERMITS

### 4.1 Major Changes Summary

This renewal CAAPP draft is presented in a new format. The new format is the result of recommendations by the USEPA, comments made by sources, and interactions with the public.

| | *Previous CAAPP Permit Layout* | *New CAAPP Permit Layout* |
|---|---|---|
| Section 1 | Source Identification | Source Information |
| Section 2 | List Of Abbreviations/Acronyms | General Permit Requirements |
| Section 3 | Insignificant Activities | Source Requirements |
| Section 4 | Significant Emission Units | Emission Unit Requirements |
| Section 5 | Overall Source Conditions | Title I Requirements |
| Section 6 | Emission Control Programs | Insignificant Activities |
| Section 7 | Unit Specific Conditions | Other Requirements |
| Section 8 | General Permit Conditions | State Only Requirements |
| Section 9 | Standard Permit Conditions | --- |
| Section 10 | Attachments | Attachments |

### 4.2 Specific Permit Condition Changes

a. Heatset Web Offset Lithographic Printing Presses #7 and #8 with Natural Gas Fired Dryer where not constructed Construction Permit #97080012 and are not included in Section 4.2.

b. Section 4.2 Heatset Web Offset Lithographic Printing Presses (#4110, #4120, #4170, #4130, #4140, and #4150) has a separate section due to the Construction Permit #97080012 Fountain Solution and Cleaning Solution LAER requirements do not match 35 IAC 218.407(a)(1) Fountain Solution or 35 IAC 218.407(a)(4) Cleaning Solution requirements.

c. Section 4.3 Heatset Web Offset Lithographic Printing Press #4190 with Natural Gas Fired Dual-Dryer (12.0 mmBtu/hour) constructed per Construction Permit #07070061.

d. Fee Schedule revised:

Section 5.5.1 Old CAAPP (strikethrough)
Section 2.7 in SOB
Section 8.1 CAAPP renewal

| *Pollutant* | | *Tons/Year* |
|---|---|---|
| Volatile Organic Material | (VOM) | ~~62.25~~ 87.35 |
| Sulfur Dioxide | ($SO_2$) | ~~0.10~~ 0.13 |
| Particulate Matter | (PM) | ~~1.25~~ 1.65 |
| Nitrogen Oxides | ($NO_x$) | ~~16.0~~ 21.23 |
| HAP, not included in VOM or | (HAP) | ~~19.40~~ 0.00 |
| Total | | ~~99.00~~ 110.36 |

## Endnotes

[1] The federal PSD program, 40 CFR 52.21, applies in Illinois. The Illinois EPA administers PSD permitting for major projects in Illinois pursuant to a delegation agreement with USEPA.

[2] Illinois has a state nonattainment NSR program, pursuant to state rules, Major Stationary Sources Construction and Modification ("MSSCM"), 35 IAC Part 203, which have been approved by USEPA as part of the State Implementation Plan for Illinois.

[3] The provisions of the Act for Periodic Monitoring in CAAPP permits reflect parallel requirements in the federal guidelines for State Operating Permit Programs, 40 CFR 70.6(a)(3)(i)(A), (a)(3)(i)(B), and (c)(1).

[4] Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain "Compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit."

[5] The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with the applicable standards or limits.

[6] Another example of emission standards for which requirements must be established as part of Periodic Monitoring is certain NSPS standards that require initial performance testing but do not require periodic testing or other measures to address compliance with the applicable limits on a continuing basis.

[7] The need to establish Monitoring requirements as part of Periodic Monitoring when existing compliance procedures are determined to be inadequate, as well as when they are absent, was confirmed by the federal appeals court in Sierra Club v. Environmental Protection Agency, 536 f. 3d 673, 383 U.S. App. D.C. 109.

[8] The need to establish Monitoring requirements as part of Periodic Monitoring is also confirmed in USEPA's Petition Response. USEPA explains that "…if there is periodic monitoring in the applicable requirements, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance." Petition Response, page 6.

[9] The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); *see also* 40 CFR 70.6(a)(3)(i)(B); *see also, In the Matter of CITGO Refinery and Chemicals Company L.P.,* Petition VI-2007-01 (May 28, 2009); *see also, In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana,* Petition VI-2009-01 (May 27, 2010); *see also, In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant,* Petition V-2009-01 (June 28, 2010).

[10] A number of these factors are specifically listed by USEPA in its Petition Response. USEPA also observes that the specific factors that it identifies in its Petition Response with respect to Periodic Monitoring provide "…the permitting authority with a starting point for its analysis of the adequacy of the monitoring; the permitting authority also may consider other site-specific factors." Petition Response, page 7.