

**Commonwealth of Kentucky  
Energy and Environment Cabinet  
Department for Environmental Protection  
Division for Air Quality  
300 Sower Boulevard, 2<sup>nd</sup> Floor  
Frankfort, Kentucky 40601  
(502) 564-3999**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:030**

**Permittee Name:** The Hennegan Company  
**Mailing Address:** 7455 Empire Drive, Florence, KY 41042

**Source Name:** The Hennegan Company  
**Mailing Address:** 7455 Empire Drive  
Florence, KY 41042

**Source Location:** 7455 Empire Drive

**Permit ID:** F-20-019  
**Agency Interest #:** 37191  
**Activity ID:** APE20200001  
**Review Type:** Conditional Major, Operating  
**Source ID:** 21-015-00088

**Regional Office:** Florence Regional Office  
8020 Veterans Memorial Drive, Suite 110  
Florence, KY 41042  
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**County:** Boone

**Application Complete Date:** May 5, 2020  
**Issuance Date:**  
**Expiration Date:**

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**Melissa Duff, Director  
Division for Air Quality**

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	<b>Permit type</b>	<b>Activity#</b>	<b>Complete Date</b>	<b>Issuance Date</b>	<b>Summary of Action</b>
<b>F-20-019</b>	<b>Renewal</b>	<b>APE20200001</b>	<b>5/5/2020</b>		<b>Renewal Permit</b>

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **EP01 (01W, 02W & 03W) Web Presses Utilizing Heat Set Inks**

#### **Description:**

**01W** is an **8-color Baker Perkins Web Printing Press** using a fountain solution to distinguish between print area and non-print area with an oven (2.93 MMBtu/hr natural gas), an automated blanket washing system, and a chiller.

<b>Construction commenced:</b>	1986
<b>Modified to accommodate aqueous coating:</b>	January 2001.
<b>Modified to add two coating rollers:</b>	December 2014.

**02W** is a **6-color Baker Perkins G14 Web Printing Press** using a fountain solution to distinguish between print area and non-print area with an oven (2.93 MMBtu natural gas), an automated blanket washing system, and a chiller.

<b>Construction commenced:</b>	1991
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**03W** is an **8-color Heidelberg Web Printing Press** using a fountain solution to distinguish between print area and non-print area with an oven (4.0 MMBtu/hr natural gas), automated blanket washing system, and a chiller.

<b>Construction commenced:</b>	2001
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**Control Equipment:** VOC emissions from 01W - 03W are controlled by a regenerative thermal oxidizer with a 4.5 MMBtu/hr natural gas burner. On July 21, 2016, the VOC destruction and removal efficiency of the thermal oxidizer was determined on average to be 92.8%. The permit limit is 90%.

<b>Control Equipment in operation:</b>	February, 2002
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#### **APPLICABLE REGULATIONS:**

**401 KAR 50:012**, General application

**401 KAR 59:010**, New process operations

**401 KAR 63:020**, Potentially hazardous matter or toxic substances

#### **NON-APPLICABLE REGULATION:**

**401 KAR 51:052**, Review of new sources in or impacting upon nonattainment areas, applies to new major sources or major modifications commenced after September 22, 1982 located in a nonattainment area. This regulation has been determined by the Division to not be applicable due to limitations to be imposed on the source.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 1. Operating Limitations:

#### **401 KAR 50:012 (a-g)**

The following limits are required by Section 1(1) of 401 KAR 50:012. The limits have been established by the Division and represent control procedures that are reasonable and available.

- a. For each web press, its respective dryer shall operate at negative pressure relative to the surrounding pressroom.

#### **Compliance Demonstration Method:**

The permittee shall install, maintain and operate a device to continuously monitor the air flow or duct pressure to the oxidizer and establish a range of operation. The oxidizer must be operated within this range at all times whenever the presses are in operation.

- b. When a web press is in operation, combustion temperature of the RTO shall be maintained at or above the average temperature established during the most recent performance test.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated by recording RTO combustion chamber temperature at least once every 15 minutes, calculating the 3-hour average combustion chamber temperature and then comparing it to the average temperature established during the most recent performance test. A 3-hour average will also be used for web press runs less than 3- hours.

- c. The fountain solution utilized by each press shall not contain alcohol.

*Note: Alcohol is defined to mean normal propyl alcohol, ethanol, and isopropyl alcohol.*

- d. The fountain solution as applied to the web presses shall contain no more than 5% VOC by weight.

#### **Compliance Demonstration Method:**

The VOC content of fountain solutions applied at each press shall be demonstrated to be no more than 5%.

$$\begin{aligned} & \text{VOC content (\% by weight)} = 100\% \\ & \times \sum [\text{gallons of each ingredient in the applied fountain solution} \\ & \quad \times \text{VOC content (in lbs/gal) of the ingredient}] \\ & / \sum [\text{gallons of each ingredient in the applied fountain solution} \\ & \quad \times \text{density (in lbs/gal) of the ingredient}] \end{aligned}$$

- e. Cleaning solutions shall be limited to a maximum vapor pressure of 10 mm Hg @ 20° C.
- f. Evaporative losses from cleaning solutions shall be minimized. Unused solutions and waste portions (including solvent laden towels) shall be stored in closed containers.

#### **Compliance Demonstration Method:**

Surrogate monitoring and record keeping shall be used to demonstrate compliance with the requirement for c, d, e and f above.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- g. Process interlocked pressure switches shall be installed, maintained, and operated according to manufacturer's instructions while the respective press is in operation to ensure that the dryers operate at a negative pressure relative to the surrounding pressroom. Additionally, the pressure switches shall be inspected at least once annually.

**401 KAR 59:010 (h-j)**

- h. Only inks designed for use with heat set web presses shall be used.
- i. Operation and maintenance of the presses and control devices shall be practiced in accordance with manufacturer's specifications.
- j. Raw material use and demonstrated capture efficiency, control efficiency at the web presses shall be such that VOC emitted from the web presses does not exceed the limitations in Section B.2

**2. Emission Limitations:****401 KAR 59:010**

- a. Section 3(1) limits visible emissions to less than 20% opacity.
- b. Section 3(2) limits emissions of particulate matter from each press to a maximum of 2.34 lbs/hr.

**Compliance Demonstration Method:**

The affected facilities have been assumed to be in compliance with particulate mass and visible emissions as long as the web presses are operated properly, appropriate inks are used.

**401 KAR 50:012**

The following limit is required by Section 1(1) of 401 KAR 50:012. The limit has been established by the Division and represents control procedures that are reasonable and available.

- c. At least 90% of the VOC emissions entering the dryer exhausts shall be eliminated from the stack while any web press is in operation.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through testing once every five years and monitoring. If the three hour average combustion chamber temperature recorded at least once every 15-minute is equivalent to or greater than average temperature established for the RTO during the most recent performance test, then control efficiency of the RTO is assumed to be equivalent to the efficiency measured during the most recent performance test.

**401 KAR 51:052, New Source Review Synthetic Minor Limitation**

The following limitation has voluntarily been accepted to avoid applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas. The limitation results from larger applicable synthetic minor limitations and the permittee's choice to simplify record keeping requirements.

- d. For any 12 consecutive month period, VOC emissions from the web presses shall be less than or equal to 40.0 tons as demonstrated on a monthly basis.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Compliance Demonstration Method:

Compliance shall be demonstrated through surrogate monitoring, record keeping, and calculation of VOC emissions from the web presses each month. From the monthly calculations, VOC emissions can be determined for each 12 consecutive month period. Use the following equation to determine the VOC emission each month.

### Monthly VOC Emissions (lbs) =

$\Sigma \{ \text{Ink used (lb)} \times \text{VOC content (weight \%)} \times (1 - \text{substrate retention}) \times (1 - \text{Ink capture efficiency} \times \text{control efficiency of oxidizer}) \} +$

$\Sigma \{ \text{Fountain Solution Concentrate used (gal)} \times \text{VOC content (lbs/gal)} \times (1 - [\text{Fountain Solution capture efficiency} \times \text{control efficiency of oxidizer}]) \} +$

$\Sigma \{ \text{Fountain Solution Additive used (gal)} \times \text{VOC content (lbs/gal)} \times (1 - [\text{Fountain Solution capture efficiency} \times \text{control efficiency of oxidizer}]) \} +$

$\Sigma \{ \text{Automatic Blanket Wash used (gal)} \times \text{VOC content (lbs/gal)} \times (1 - [\text{Automatic Blanket Wash capture efficiency} \times \text{control efficiency of oxidizer}]) \} +$

$\Sigma \{ \text{Hand Cleaning Solution used (gal)} \times \text{VOC content (lbs/gal)} \times (1 - \% \text{ VOC emission reduction due to solution remaining in rags}) \} +$

$\Sigma \{ \text{Other VOC containing materials (gal)} \times \text{VOC content (lbs/gal)} \times (1 - \text{substrate retention}) \times (1 - \text{capture efficiency} \times \text{control efficiency of oxidizer}) \}$

**Monthly VOC Emissions (tons) = Monthly VOC Emissions (lbs) / 2000**

Assuming capture and control are verified through parametric monitoring described in this permit, the following shall be utilized in the above equation (absent subsequent testing an approval by the Division).

Ink capture efficiency	=	100%
Automatic blanket wash capture efficiency	=	40%
Fountain solution capture efficiency	=	70%
% VOC emission reduction due to cleaning solution remaining in rags	=	50%, when <u>1. Operating Limitations: e. and f.</u> are complied with
VOC retention factor for ink	=	20%
Control efficiency of oxidizer*	=	92.8 %

\* - The control efficiency of the oxidizer is based on the test done by Hennegan, on 7/21/2016, using appropriate EPA Methods approved by the Division.

e. Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

f. See Section D.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:****401 KAR 50:012**

As part of the requirements imposed by Section 1(1) of 401 KAR 50:012, VOC control efficiency of the regenerative thermal oxidizer shall be reevaluated through testing using appropriate EPA Methods at least once every 5 years. The 3 hour average combustion temperature shall be recorded to establish the minimum operating temperature. Alternative control efficiency determinations may be made only with the approval of the Division.

**4. Specific Monitoring Requirements:****401 KAR 50:012**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012, the following monitoring shall be required to demonstrate compliance.

- a. A digital temperature recorder shall be installed, calibrated, maintained, and operated according to manufacturer's instructions in the combustion chamber.
- b. The temperature of the combustion chamber for the thermal oxidizer shall be continuously monitored while any web press is in operation.
- c. Unused and waste portions (including solvent laden towels) of cleaning solutions shall be monitored weekly to verify that the solutions are stored in closed containers.

**5. Specific Record Keeping Requirements:****401 KAR 50:012**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012, the following record keeping shall be required to demonstrate compliance or determine actual emissions.

- a. The permittee shall use a digital recorder to track temperature of the combustion chamber for the RTO at least once every 15 minutes.
- b. The time and date at which a dryer does not operate under negative pressure and causes the respective press to cease operation shall be recorded. Corrective actions shall be recorded.
- c. Annual inspection for interlocked pressure switches shall be recorded.
- d. The VOC content (% by weight) of fountain solutions applied on web presses shall be calculated and recorded using the equation in Compliance Demonstration Method for 1. Operating Limitations: d.
- e. The vapor pressure and VOC content (in lbs/gal) of each cleaning solution utilized on a web press shall be recorded.
- f. Compliance status with 4. Specific Monitoring Requirements: c shall be recorded weekly to demonstrate that the monitoring was actually performed.

**401 KAR 59:010**

- g. A record of the type of ink used by the presses shall be maintained.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- h. A copy of the manufacturer's operating and maintenance specifications of the presses and control devices shall be maintained and made available to appropriate Division personnel.
- i. Any operation or maintenance that is outside of the manufacturer's recommendations shall be recorded.
- j. Dates of maintenance performance shall be recorded.

**401 KAR 51:052, New Source Review Synthetic Minor Limitation**

- k. Monthly records shall be kept of all materials containing VOC's used at the web presses, including the weight percent VOC content of each.
- l. The total VOC emission from the web presses shall be calculated and recorded for each month using the equation in the Compliance Demonstration for 2. Emission Limitations: d.
- m. The total VOC emitted from the web presses shall be recorded for each 12 consecutive month period.
- n. Monthly records (including MSDS) shall be maintained by the source for the most recent five (5) years. These records shall be made available to the Division or the U.S. EPA upon request.

**6. Specific Reporting Requirements:****401 KAR 50:012 and 401 KAR 51:052, New Source Review Synthetic Minor Limitation**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012 and compliance demonstration for 2. Emission Limitations: d., the following shall be required. Reports shall be certified by a responsible official and delivered or postmarked to the Division's Florence Regional Office prior to January 30<sup>th</sup> and July 30<sup>th</sup> of each year.

- a. Minimum combustion chamber temperature during semiannual reporting periods shall be reported.
- b. All information collected during semiannual reporting periods to comply with 5. Specific Record Keeping Requirements: b shall be reported.
- c. The VOC content of the fountain solutions utilized on the web presses during semiannual reporting periods shall be reported.
- d. The total VOC emission from the web presses each month during semiannual reporting periods shall be reported.
- e. The total VOC emitted from the web presses each 12 consecutive month period ending during semiannual reporting periods shall be reported.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- f. Any noncompliance with above permit conditions during semiannual reporting periods shall be reported and include the duration of the noncompliance. If all permit conditions were complied with, the permittee shall report that all permit conditions were complied with.

**7. Specific Control Equipment Operating Conditions:**

See Operating Limitations.

**8. Alternate Operating Scenarios:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****EP02 (06SF, 07SF, 08SF and 09SF)****Sheet Fed Lithographic Presses****Description:**

**06SF** is an **8-color Heidelberg Sheet Fed Printing Press** using a fountain solution to distinguish between print area and non-print area and each is equipped with a UV lamp to set UV ink. Also is cleaned manually and is equipped with automated blanket washers.

**Construction commenced:** May 1996.

06SF replaced by like press while under warranty: December 1999.

**07SF** is an **8-color Heidelberg Sheet Fed Printing Press** using a fountain solution to distinguish between print area and non-print area and each is equipped with a UV lamp to set UV ink. Also is cleaned manually and is equipped with automated blanket washers.

**Construction commenced:** December 1998.

**08SF** is a **12-color Heidelberg Sheet Fed Printing Press** using a fountain solution to distinguish between print area and non-print area and each is equipped with a UV lamp to set UV ink. Also is cleaned manually and is equipped with automated blanket washers.

**Construction commenced:** September 2005.

**09SF** is a **12-color KBA Sheet Fed Printing Press** using a fountain solution to distinguish between print area and non-print area and each is equipped with a UV lamp to set UV ink. Also is cleaned manually and is equipped with automated blanket washers.

**Construction commenced:** January 2019.

**APPLICABLE REGULATIONS:**

**401 KAR 50:012**, General application

**401 KAR 59:010**, New process operations

**401 KAR 63:020**, Potentially hazardous matter or toxic substances

**NON-APPLICABLE REGULATION:**

**401 KAR 51:052**, Review of new sources in or impacting upon nonattainment areas, applies to new major sources or major modifications commenced after September 22, 1982 located in a nonattainment area. This regulation has been determined by the Division to not be applicable due to limitations to be imposed on the source.

**1. Operating Limitations:**

**401 KAR 50:012 (a-d)**

The following limits are required by Section 1(1) of 401 KAR 50:012. The limits have been established by the Division and represent control procedures that are reasonable and available.

- a. The fountain solution utilized by each press shall not contain alcohol.

*Note: Alcohol is defined to mean normal propyl alcohol, ethanol, and isopropyl alcohol.*

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. The fountain solution applied to the sheetfed presses shall contain no more than 5% VOC by weight.

**Compliance Demonstration Method:**

See the Compliance Demonstration Method for 1. Operating Limitations: d under EP01 in Section B.

- c. Cleaning solutions shall be limited to a maximum vapor pressure of 10 mm Hg @ 20° C.
- d. Evaporative losses from cleaning solutions shall be minimized. Unused solutions and waste portions (including solvent laden towels) shall be stored in closed containers.

**Compliance Demonstration Method:**

Surrogate monitoring and record keeping shall be used to demonstrate compliance with the requirement.

**401 KAR 59:010 (e & f)**

- e. Only inks designed for use with the sheet fed presses shall be used.
- f. Operation and maintenance of the presses shall be practiced in accordance with manufacturer's specifications.
- g. Raw material use at the sheet fed presses shall be such that VOC emitted, calculated using the compliance demonstration method for 2. Emission Limitations: c, from the sheet fed presses does not exceed the limitations in section B.2.

**2. Emission Limitations:****401 KAR 59:010**

- a. Section 3(1) limits visible emissions to less than 20% opacity.
- b. Section 3(2) limits emissions of particulate matter from each press to a maximum of 2.34 lbs/hr.

**Compliance Demonstration Method:**

Particulate emissions and opacity from the sheetfed presses have been assumed to be minimal as long as the presses are operated properly, appropriate inks are used, and natural gas is burned in the ovens.

**401 KAR 51:052, New Source Review Synthetic Minor Limitation**

The following limitation has voluntarily been accepted to avoid applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas. The limitation results from larger applicable synthetic minor limitations and the permittee's choice to simplify record keeping requirements.

- c. For any 12 consecutive month period, VOC emissions from the sheet fed presses shall be less than or equal to 40.0 tons as demonstrated on a monthly basis.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Compliance Demonstration Method:**

Compliance shall be demonstrated through record keeping and calculation of VOC emissions from the sheet fed presses each month. From the monthly calculations, VOC emissions can be determined for each 12 consecutive month period. Use the following equation to determine the VOC emission each month.

$$\begin{aligned} \text{VOC emitted (lbs)} = & \sum [\text{lbs of each ink or varnish used} \\ & \times \text{VOC weight \% of ink or varnish}] \times (1 - \text{substrate retention}) \\ & + \sum [\text{lbs of each other coating used} \times \text{VOC weight \% of other coating}] \\ & + \sum [\text{gallons of each manually applied cleaning solution used} \\ & \times \text{VOC content of solution (lbs/gal)}] \\ & \times (1 - \% \text{ VOC emission reduction due to solution remaining in rags}) \\ & + \sum [\text{gallons of each automatically applied cleaning solution used} \\ & \times \text{VOC content of solution (lbs/gal)}] \\ & + \sum [\text{gallons of each fountain additive used} \times \text{VOC content of the additive (lbs/gal)}] \end{aligned}$$

The following shall be utilized in the above equation (absent subsequent testing and approval by the Division).

% VOC emission reduction due to cleaning	=	50%, when 1. <u>Operating Limitations:</u>
Solution remaining in rags		<u>c and d</u> are complied with
VOC retention factor for ink	=	95%

- d. Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.
- e. See Section D.

### **3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

### **4. Specific Monitoring Requirements:**

#### **401 KAR 50:012**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012, the unused and waste portions (including solvent laden towels) of cleaning solutions shall be monitored weekly to verify that the solutions are stored in closed containers.

### **5. Specific Record Keeping Requirements:**

#### **401 KAR 50:012**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012, the following record keeping shall be required to demonstrate compliance or determine actual emissions.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. The VOC content (% by weight) of fountain solutions applied on sheet fed presses shall be calculated and recorded using the equation in Compliance Demonstration Method for 1. Operating Limitations: d. under EP01 in Section B.
- b. The vapor pressure and VOC content (in lbs/gal) of each cleaning solution utilized on the sheet fed presses shall be recorded.
- c. Monitored storage of cleaning solutions that is not consistent with 1. Operating Limitations: d. shall be recorded.
- d. Compliance status with 4. Specific Monitoring Requirement shall be recorded weekly to demonstrate that the monitoring was actually performed.

**401 KAR 59:010**

- e. A record of the type of ink used by the presses shall be maintained.
- f. A copy of the manufacturer's operating and maintenance specifications shall be maintained and made available to appropriate Division personnel.
- g. Any operation or maintenance that is outside of the manufacturer's recommendations shall be recorded.
- h. Dates of maintenance performance shall be recorded.

**401 KAR 51:052, New Source Review Synthetic Minor Limitation**

- i. Monthly records shall be kept of all materials containing VOC's used at the sheet fed presses, including the weight percent VOC content of each.
- j. The total VOC emission from the sheet fed presses shall be calculated and recorded for each month using the equation in the Compliance Demonstration for 2. Emission Limitations: c.
- k. The total VOC emitted from the sheet fed presses shall be recorded for each 12 consecutive month period.
- l. Monthly records (including MSDS) shall be maintained by the source for the most recent two (2) year period. These records shall be made available to the Division or the U.S. EPA upon request.

**6. Specific Reporting Requirements:****401 KAR 50:012 and New Source Review Synthetic Minor Limitation**

As part of the requirements resulting from Section 1(1) of 401 KAR 50:012 and compliance demonstration for 2. Emission Limitations: c., the following shall be required. Reports shall be certified by a responsible official and delivered or postmarked to the Division's Florence Regional Office prior to January 30<sup>th</sup> and July 30<sup>th</sup> of each year.

- a. The VOC content of the fountain solutions utilized on the sheetfed presses during semiannual reporting periods shall be reported.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. The total VOC emission from the sheetfed presses each month during semiannual reporting periods shall be reported.
- c. The total VOC emitted from the sheetfed presses each 12 consecutive month period ending during semiannual reporting periods shall be reported.
- d. Any noncompliance with above permit conditions during semiannual reporting periods shall be reported and include the duration of the noncompliance. If all permit conditions were complied with, the permittee shall report that all permit conditions were complied with.

**7. Specific Control Equipment Operating Conditions:**

N/A

**8. Alternate Operating Scenarios:**

N/A

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	Video Inkjet Printer	None
2.	(1) One Paper Baler	401 KAR 59:010
3.	(9) Nine Gluepots	None
4.	(10) Ten Shrink Wrap Units	None
5.	Phoenix Inkjet Line	None
6.	Lunch Rm Boiler #1 553,000 BTU/hr	None
7.	Lunch Rm Boiler #2 546,000 BTU/hr	None
8.	Water heater #1 75,100 BTU/hr	None
9.	Water heater #2 75,100 BTU/hr	None
10.	Ship Office Heater 100,000 BTU/hr	None
11.	Bindery Office Heater 100,000 BTU/hr	None

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. VOC emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

Source-wide VOC emissions shall not exceed eighty (80) tons during any consecutive twelve (12) month period.

### **Compliance Demonstration Method:**

$$\text{Emissions (VOC)} = \sum_{i=1}^n M_i \rho_i$$

Where M = Monthly pounds of material applied at point i.

$\rho$  = percent by weight of VOC in material; and

n = total number of emission points

Source-wide VOC emissions =  $\sum$  [VOC emissions from printing processes] +  $\sum$  [VOC emissions from gas combustion (estimated gas usage is acceptable)]

The VOC emitted from gas combustion are:

Emissions (VOC) = (VOC Emission Factor lb/MMft<sup>3</sup>) x (MMft<sup>3</sup> gas burned/month)

**Annual VOC Emissions** = Sum of any consecutive twelve (12) month VOC emissions.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030, Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26 shall be defined as follows:
  - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
  - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
  - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the Division for Air Quality, Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, KY 41042.
10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030, Section 12;
  - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, Section 3(1)(c)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-12 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030, Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030, Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030, Section 8(2)].

**3. Permit Revisions**

- a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:030, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

No construction authorized by this permit (F-20-019).

**SECTION G - GENERAL PROVISIONS (CONTINUED)****5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
  - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].
  - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(2)].
8. Ozone depleting substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
    - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
    - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
    - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
    - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
    - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
    - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
  - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP\* eSubmit software.
- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

N/A

**SECTION I - COMPLIANCE SCHEDULE**

N/A