



Environmental Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

4/19/2011

Certified Mail

Michelle Poole  
Bemis Company, Inc.  
1972 AKRON PENINSULA RD.  
Akron, OH 44313

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 1677000105  
Permit Number: P0106672  
Permit Type: Administrative Modification  
County: Summit

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Akron Regional Air Quality Management District. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA  
ARAQMD; Pennsylvania; West Virginia; Canada





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Bemis Company, Inc.**

Facility ID: 1677000105  
Permit Number: P0106672  
Permit Type: Administrative Modification  
Issued: 4/19/2011  
Effective: 4/19/2011





Division of Air Pollution Control
Permit-to-Install
for
Bemis Company, Inc.

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## Authorization

Facility ID: 1677000105  
Facility Description: Paper coating & laminated, packaging.  
Application Number(s): M0000892  
Permit Number: P0106672  
Permit Description: Administrative modification of Permit to Install 16-02495 issued final on August 2, 2007 to add in Best Available Technology emission limitations and to incorporate the changes requested by the facility for the flexographic printing press, emissions unit K021.  
Permit Type: Administrative Modification  
Permit Fee: \$100.00  
Issue Date: 4/19/2011  
Effective Date: 4/19/2011

This document constitutes issuance to:

Bemis Company, Inc.  
1972 AKRON PENINSULA RD.  
AKRON, OH 44313

of a Permit-to-Install for the emissions unit(s) identified on the following page.

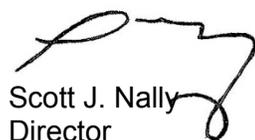
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, OH 44308  
(330)375-2480

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0106672  
Permit Description: Administrative modification of Permit to Install 16-02495 issued final on August 2, 2007 to add in Best Available Technology emission limitations and to incorporate the changes requested by the facility for the flexographic printing press, emissions unit K021.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>K021</b>
Company Equipment ID:	Vision 2
Superseded Permit Number:	16-02495
General Permit Category and Type:	Not Applicable

## **A. Standard Terms and Conditions**

**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

**2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

**3. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### 4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Akron Regional Air Quality Management District.
  - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations,

excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Akron Regional Air Quality Management District. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Akron Regional Air Quality Management District every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Akron Regional Air Quality Management District in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## 6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Akron Regional Air Quality Management District concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

## **8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Akron Regional Air Quality Management District.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Akron Regional Air Quality

Management District. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## **10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

## **11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate

without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## 12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

## 13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

## 14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

## 15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

## **B. Facility-Wide Terms and Conditions**

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Bemis Company, Inc. requested the following emission limitations. The volatile organic compound (VOC) emission limitation is in place to avoid Prevention of Significant Deterioration (PSD) permitting. The hazardous air pollutant (HAP) emission limitations are in place to avoid being subject to the National Emission Standard for the Printing and Publishing Industry (40 CFR Part 63, Subpart KK).
  - a) The emissions of any individual HAP from emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall not exceed 9.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.
  - b) The emissions of combined HAPs from emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall not exceed 24.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.
  - c) The emissions of VOC from emission units K003, K008, K010, K016, K020, T001, T002, and T003, combined, shall not exceed 358.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.
3. In order to determine compliance with the emission limitations in B.2 above, the permittee shall maintain monthly records of the following information:
  - a) For emissions units K003, K008, K010, K016, K020, and K021:
    - (1) A unique name or identification number for each ink, coating, thinning solvent and cleanup solvent used;
    - (2) The VOC content of each ink, coating, thinning solvent and cleanup solvent used, in percent by weight;
    - (3) The individual HAP content for each HAP of each ink, coating, thinning solvent and cleanup solvent used, in percent by weight;
    - (4) For any material that is vented to the catalytic oxidizer all of the time, the total pounds of each ink, coating, thinning solvent and cleanup solvent used;
    - (5) For any material that is vented to atmosphere either all of the time or part of the time, keep the following records on a by station basis:
      - a. The total pounds of each ink, coating, thinning solvent and cleanup solvent used on a station with emissions controlled by the catalytic oxidizer;
      - b. The total pounds of each ink, coating, thinning solvent and cleanup solvent used on a station with emissions vented directly to atmosphere;
    - (6) A unique name or identification number for each type of waste collected for disposal;
    - (7) The VOC content of each type of waste collected for disposal, in percent by weight;

- (8) The total pounds of each type of waste collected for disposal;
- (9) The linear feet produced by each emission unit; and
- (10) The total linear feet produced by all of the emission units combined.

These records may be kept on a line by line basis or for the materials that are always controlled by the catalytic oxidizer the amount assigned to each line may be estimated based on the ratio of the linear feet produced on a given line divided by the total linear feet produced by all of the emission units combined.

b) For emission unit P010:

- (1) The total pounds of film cleaning materials used;
- (2) The total pounds of plate wash materials used;
- (3) The individual HAP content for each HAP of each film cleaning material and each plate wash material used, in percent by weight;
- (4) The total pounds of plate wash materials retained in still bottoms as part of the reclaim process; and
- (5) The individual HAP content for each HAP of the plate wash material retained in still bottoms as part of the reclaim process, in percent by weight.

c) For emission units T001, T002, and T003:

- (1) The three storage tanks combined were determined to have potential emissions of 3 tons per year (or 0.25 tons per month). This may be used to estimate emissions for demonstration of compliance (e.g. VOC = 3 tons per year, combined for T001, T002, and T003, HAP = 1 ton per year per tank times the weight fraction of HAP of the material stored in the storage tank), or
- (2) Keep records of the monthly solvent composition and throughput along with sufficient physical tank construction data to calculate the working and breathing losses of each storage tank using the last version of US EPA Tanks emissions estimation software.

d) The site wide consumption of natural gas.

e) Each month the permittee shall calculate and record the following values for the previous month as well as the summation of the values for the previous 12-month period. Any credible method for performing these calculations is acceptable so long as the permittee retains records of how they were completed.

- (1) For each emission unit, the calculated actual individual HAP emission rate for each HAP, in ton(s) per month\*.
- (2) For the combustion of natural gas, the calculated actual individual HAP emission rate for each HAP, in ton(s) per month, using established US EPA emission factors.

- (3) The individual HAP emissions for each HAP for the last 12-month period for emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall be summed with the individual HAP emissions for each HAP from the combustion of natural gas for the last 12-month period and compared to the emission limitation contained in 2.a) above.
- (4) For each emission unit, the calculated actual combined HAP emission rate in tons per month\*.
- (5) For the combustion of natural gas, the calculated actual combined HAP emission rate in tons per month using established US EPA emission factors.
- (6) The combined HAP emissions for the last 12-month period for emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall be summed with the combined HAP emissions from the combustion of natural gas for the last 12-month period and compared to the emission limitation contained in 2.b) above.
- (7) For each emission unit, the calculated actual VOC emission rate in tons per month\*.
- (8) For the combustion of natural gas, the calculated actual VOC emission rate in tons per month using established US EPA emission factors.
- (9) The VOC emissions for the last 12-month period for emission units K003, K008, K010, K016, K020, T001, T002, and T003, combined, shall be summed with the VOC emissions from the combustion of natural gas for the last 12-month period and compared to the emission limitation contained in 2.c) above.

\*The permittee may take into account any quantifiable HAP and/or VOC retained in waste as well as the catalytic oxidizer's overall control efficiency in making these calculations. The overall control efficiency incorporated into the calculations must be the efficiency determined during the most recent emission test that demonstrated the emission unit was in compliance.

4. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a) all exceedances of the rolling, 12-month emission limitation for VOC;
  - b) all exceedances of the rolling, 12-month emission limitation for individual HAP; and
  - c) all exceedances of the rolling, 12-month emission limitation for total combined HAPs.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

5. Compliance with the emission limitations in 2 above shall be determined in accordance with the following methods:
  - a) Emission Limitations:

The emissions of any individual HAP from emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall not exceed 9.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of combined HAPs from emission units K003, K008, K010, K016, K020, K021, P010, T001, T002, and T003, combined, shall not exceed 24.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of VOC from emission units K003, K008, K010, K016, K020, T001, T002, and T003, combined, shall not exceed 358.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual emission limitations above shall be demonstrated through the record keeping requirements established in 3.a), 3.b), 3.c), 3.d), and 3.e) above.

When required, formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the coatings and inks. Formulation data shall be used to determine the HAP contents of the coatings, inks and solvents.

6. When required by a term and condition in Section C below to utilize a catalytic oxidizer to control emissions, the catalytic oxidizer shall be operated in accordance with the following:

a) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the temperature immediately upstream and downstream of the oxidizer's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Temperature units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic incinerator was/were in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
- b. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic incinerator was/were in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
- c. A log of operating time for the capture (collection) system, catalytic oxidizer, monitoring equipment, and the associated emissions unit(s). The permittee may use the current temperature chart as the log documenting that the monitoring

equipment and control device are operating. Bypass of the collection system by the emissions unit(s) shall be logged as to the date and time.

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than 3 years.

- (2) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
  - b. the magnitude of the deviation at that time;
  - c. the date the investigation was conducted;
  - d. the name(s) of the personnel who conducted the investigation; and
  - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the temperature of the exhaust gases immediately before the catalyst after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The catalyst conversion efficiency shall be evaluated and compared to typical values for fresh catalyst. Any findings that the conversion efficiency is beyond the operational range of the catalyst, as defined by the manufacturer, is not necessarily indicative of an emission violation but rather serves as a trigger level for maintenance and/or repair activities, or

further investigation to establish proper operation of the catalytic oxidizer. Solvent loading during the catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

- (4) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, on at least an annual basis. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations, as specified in the document entitled "Recommended Annual Inspection Points and Procedures" as submitted to the Ohio EPA on February 26, 2002 or as revised by the manufacturer, and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Revisions to the "Recommended Annual Inspection Points and Procedures" document shall be submitted to the Akron Regional Air Quality Management District for review prior to implementation. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in c)(1) below, a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in c)(1) below. The permittee shall also perform weekly inspections of the external integrity of the catalytic oxidizer.
- (5) The permittee shall maintain a record of the results of each annual and weekly inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in c)(1) below.

b) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of the emissions units:
  - a. all 3-hour blocks of time (when required by a term and condition in Section C to utilize an catalytic oxidizer to control emissions) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was/were in compliance;
  - b. all 3-hour blocks of time (when required by a term and condition in Section C to utilize an catalytic oxidizer to control emissions) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was/were in compliance;
  - c. a summary of the operating time for the capture (collection) system, catalytic oxidizer, monitoring equipment, and the emissions unit(s);
  - d. an identification of each incident of deviation described in b)(1)a. above where a prompt investigation was not conducted;
  - e. an identification of each incident of deviation described in b)(1)a. above where prompt corrective action, that would bring the average temperature of the

exhaust gases immediately before the catalyst bed into compliance with the acceptable value, was determined to be necessary and was not taken; and

- f. an identification of each incident of deviation described in b)(1)a. above where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

NOTE: Information submitted pursuant to b)(1)b. above is not relevant for determining compliance with any operational restrictions and monitoring and record keeping contained in a) above.

- (2) The permittee shall submit reports that include the results of the catalyst activity tests required in c)(1) below and a description of any repairs, maintenance, and/or further investigation taken to ensure the proper operation of the catalytic oxidizer. These reports shall be submitted within 45 days after each catalyst activity test is performed.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the findings of any inspection that determined the external structural integrity of the catalytic oxidizer has been jeopardized and it no longer operates as designed.
- (4) The permittee shall submit annual reports that summarize the results of each annual inspection of the internal integrity of the catalytic oxidizer, based on records maintained pursuant to a)(4) above. These reports shall be submitted within 45 days after each inspection is performed.

c) **Testing Requirements**

- (1) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in a)(4) above. An intent to test notification shall not be required for the testing noted in this term. The procedures for the catalyst activity test shall be in accordance with the manufacturer's recommendations.

## **C. Emissions Unit Terms and Conditions**



1. K021, Vision 2

Operations, Property and/or Equipment Description:

flexographic printing press with in-line adhesive station and in-line flexo station - Vision 2.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>The emissions of volatile organic compounds (VOC) from this emissions unit which includes the central impression (CI) station, in-line adhesive station, and in-line flexo station shall not exceed 16.22 pounds of per hour.</p> <p>(See b)(2)a. below.)</p> <p>For the CI station and in-line flexo station:</p> <p>The CI station and in-line flexo station shall be equipped with a capture system and associated control system which are designed and operated to achieve a control (destruction) efficiency which is at least 95 percent, by weight, and a capture efficiency which is at least 90 percent, by weight, for VOC.</p> <p>For the in-line adhesive station:</p> <p>The in-line adhesive station shall be equipped with a capture system and associated control system which are designed and operated to achieve a control (destruction) efficiency which is at least 95 percent, by weight, and a capture efficiency which is at least 90 percent, by weight, for VOC, or</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>the VOC content of the coatings and inks shall not exceed the following:</p> <p>i. forty percent VOC by volume of the coating and ink, excluding water and exempt solvents; or</p> <p>ii. twenty-five percent VOC by volume of the volatile matter in the coating and ink.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).</p>
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid nonattainment NSR and MACT applicability under 40 CFR Part 63, Subpart KK)	<p>The emissions of VOC from this emissions unit which includes the CI station, the in-line adhesive station, and the in-line flexo station shall not exceed 22.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.</p> <p>For avoiding MACT applicability, see 2, 3, 4, and 5 of Section B - Facility-Wide Terms and Conditions.</p>
c.	OAC rule 3745-21-09(Y)(1)(a)	The emission limitations specified by this rule are equivalent to the emission limitations established pursuant to OAC rule 3745- 31-05(A)(3).
d.	OAC rule 3745-21-09(Y)(1)(b)	The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(C).
e.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)c. below.
f.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>The emissions from the natural gas fired dryer ovens shall not exceed the following:</p> <p>0.28 pound of nitrogen oxides (NO<sub>x</sub>) per hour and 1.20 tons of NO<sub>x</sub> per year.</p> <p>0.23 pound of carbon monoxide (CO) per hour and 1.01 tons of CO per year.</p> <p>0.02 pound of particulate emissions (PE) per hour and 0.09 ton of PE per year.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>0.002 pound of sulfur dioxide (SO<sub>2</sub>) per hour and 0.01 ton of SO<sub>2</sub> per year.</p> <p>See b)(2)b. and b)(2)d. below.</p>

(2) Additional Terms and Conditions

- a. The hourly VOC emission limitation is based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)f., f)(6)f., f)(6)g., f)(6)h., f)(6)i., and f)(6)j.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.  
  
The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled NO<sub>x</sub>, PE, CO and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for NO<sub>x</sub>, PE, CO and SO<sub>2</sub> is less than ten tons per year.
- d. The hourly and annual NO<sub>x</sub>, CO, PE, and SO<sub>2</sub> emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these emission limitations.

c) Operational Restrictions

- (1) The VOC emissions from the CI station and the in-line flexo station shall be vented to the catalytic oxidizer when the emissions unit is in operation.
- (2) When employing a coating on the in-line adhesive station that meets the requirements of OAC rule 3745-21-09(Y)(1)(a), the VOC emissions from the in-line adhesive station may be vented to the atmosphere.

- (3) When employing a coating on the in-line adhesive station that does not meet the requirements of OAC rule 3745-21-09(Y)(1)(a), the VOC emissions shall be vented the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to the catalytic oxidizer except for time periods when the emissions from the in-line adhesive station are vented to the atmosphere as allowed by c)(2) above and the emissions from the CI station and the in-line flexo station are vented to the catalytic oxidizer.
- (2) This emissions unit shall be operated with an interlock system that prevents the operation of this emissions unit unless the catalytic oxidizer is in operation. The only exception is the in-line adhesive station which may operate independent of the catalytic oxidizer as allowed by c)(2) above.
- (3) All exhaust fans associated with active stations of this emissions unit shall be in operation at all times when this emissions unit is in operation.
- (4) All bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation to ensure that all captured VOC emissions are vented to the catalytic oxidizer. The only exception is the in-line adhesive station which may operate independent of the catalytic oxidizer as allowed by c)(2) above. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

Note: It is not a deviation if an incorrect position does not cause excess emissions (i.e., emissions not required to be controlled are ducted to the catalytic oxidizer, station is not in use, etc.)

- (5) On an annual basis, the permittee shall inspect the electronics of the interlock system used for this emissions unit to verify the signals between the catalytic oxidizer and the emissions unit are functioning properly. The permittee shall document the results of all annual inspections. An excursion is defined as a finding that the interlock is inoperative. Any excursion shall require that the emissions unit be immediately shut down and remain shut down until the problem has been corrected.
- (6) Within 6 months after issuance of the permit for each emission station of this emissions unit, the permittee shall continuously monitor an indicator of flow of the emission station's exhaust, while the emission station is in operation and exhaust is being directed to the catalytic oxidizer. This can be accomplished by either monitoring the static pressure or by a direct measurement of flow. The measurement method shall be capable of accurately measuring the desired parameter and shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Monitoring data shall be recorded at least four (4) times per hour by an electronic data acquisition system or chart recorder.

Whenever the monitored value for the air flow rate or rate indicator at the outlet of the emission station deviates from the value specified below for more than five (5) consecutive minutes, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation, the permittee shall take prompt corrective action to determine the cause of the deviation and to bring the operation of the capture (collection) system within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the flow rate indicator value from the emission station measured both before and after the corrective action, and the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

An acceptable value for the indicator of flow of the emissions unit's exhaust, while the emission station of the emissions unit is in operation and exhaust is directed to the catalytic oxidizer can be no less than eighty-five percent of the average value measured during the most recent emission test that demonstrated the emissions unit was in compliance.

- (7) Each calendar month, during which the emissions unit is operated, the permittee shall inspect the operational condition and integrity of the following:
- a. Each exhaust fan comprising the capture system. Exhaust fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary.
  - b. All hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections for leaks or holes. Bypass damper observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to the catalytic oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating properly.

The permittee shall document the results of all monthly inspections, including any corrective actions taken.

- (8) The permittee shall collect and record the following information each month for the coatings employed on the in-line adhesive station that are vented to the atmosphere:

- a. the name and identification number of each coating and ink, as applied; and
- b. the VOC content in percentage VOC by volume of each coating and ink (excluding water and exempt solvents); or
- c. the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

(If the permittee mixes complying coatings that individually comply with the VOC content limitations in b)(1)a. above, it is not necessary to record the VOC content of the resulting mixture.)

- (9) If a job specification calls for a coating to be employed on the in-line adhesive station that does not comply with the requirements of b)(1)a. above, then the permittee shall maintain the following information in a log:
    - a. the date;
    - b. confirmation that the VOC emissions from the noncomplying coatings were diverted to the catalytic oxidizer; and
    - c. the personnel initials.
  - (10) Each month the permittee shall calculate and record the VOC emissions for the previous month as well as the summation of the VOC emissions for the previous 12-month period (including emissions generated from the natural gas combustion in the ovens) and compare the calculated emission rate to the emission limitation contained in b)(1)b. above. Any credible method for performing these calculations is acceptable so long as the permittee retains records of how they were completed.
  - (11) For the monitoring/record keeping requirements for the catalytic oxidizer, see 6.a)(1) through (5) in Section B: Facility-Wide Terms and Conditions.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to the catalytic oxidizer except for time periods when the emissions from the in-line adhesive station are vented to the atmosphere as allowed by c)(2) above and the emissions from the CI station and the in-line flexo station are vented to the catalytic oxidizer. Each report shall be submitted within 30 days after the deviation occurs.
  - (2) The permittee shall submit quarterly (excursion) deviation reports that identify the following:
    - a. each time the interlock system does not stop the operation of this emissions unit when the catalytic oxidizer is not in operation and its use is necessary to be in compliance;
    - b. each time any bypass dampers, actuator pins, and/or associated motors are not in the correct position and in good operating condition and/or any of the hooding

or ductwork comprising the VOC emission capture system contains leaks or holes that would permit the escape of the captured VOC emissions;

Note: It is not a deviation and does not need reported if an incorrect position does not cause excess emissions (i.e., emissions not required to be controlled are ducted to the catalytic oxidizer, station is not in use, etc.)

- c. each time findings of any inspection that determined the integrity of any ventilation fan has comprised the capture system. These reports shall include information required by 40 CFR Part 64.9(a);
- d. all exceedances of the rolling, 12-month emission limitation for VOC;
- e. each period of time, during operation of this emission unit, when the air flow rate at the outlet of this emissions unit was less than the acceptable value; and
- f. each incident of deviation described in (e) where a prompt investigation was not conducted; where prompt corrective action was determined to be necessary and was not taken; or where proper records were not maintained for the investigation and/or the corrective action.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (3) The permittee shall submit annual reports that specify the results of each annual inspection of the electronics of the ventilation fan interlock systems and the catalytic oxidizer interlock system, based on the records maintained pursuant to d)(5) above. These reports shall be submitted within 45 days after each inspection is performed.
  - (4) For the reporting requirements for the catalytic oxidizer, see 6.b)(1) through (4) in Section B: Facility-Wide Terms and Conditions.
- f) Testing Requirements
- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
    - a. Within 6 months after issuance of the permit, if the data from the August 19, 2008 stack test for this emissions unit is not sufficient to establish the operating parameter for demonstrating compliance with the capture efficiency limitation, then emission testing shall be conducted to demonstrate compliance with the capture efficiency limitation and to establish the appropriate operating parameter to ensure the capture efficiency in b)(1) is maintained.
    - b. The emission testing to demonstrate compliance with the 90 percent, by weight, capture efficiency limitation for VOC was conducted on August 19, 2008.
    - c. The emission testing to demonstrate compliance with the control (destruction) efficiency limitation specified in b)(1) above was conducted on September 6, 2006.

- d. The test method(s) which must be employed to demonstrate compliance with the capture and control (destruction) efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
  - g. The control (destruction) efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
  - h. During each capture efficiency test run, the permittee shall measure the air flow rate or rate indicator at the outlet of the emission stations for this emissions unit.
  - i. During each control (destruction) efficiency test run, the permittee shall measure the following:
    - i. the temperature of the exhaust gases immediately before the catalyst bed, in degrees F; and
    - ii. the temperature difference across the catalyst bed, in degrees F.
- (2) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- (3) Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- (4) A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- (5) For additional testing requirements for the catalytic oxidizer, see 6.c)(1) in Section B: Facility-Wide Terms and Conditions.
- (6) Compliance with the emission limitations and control and capture efficiencies requirements in b)(1) above shall be determined in accordance with the following methods:

a. Emission Limitation:

The emissions of VOC from this emissions unit which includes the CI station, in-line adhesive station, and in-line flexo station shall not exceed 16.22 pounds of per hour.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated by multiplying the maximum line speed in feet per minute by 60 minutes per hour times the maximum print/coat width in feet times the maximum pounds of VOC per ream times one ream per 3000 square feet times (1 - (0.855)\*).

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation in accordance with Methods 1-4 and 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

\*Overall control efficiency is based on the capture efficiency requirement of 90%, by weight and the control (destruction) efficiency requirement of 95%, by weight.

b. Emission Limitation:

The emissions of VOC from this emissions unit which includes the CI station, the in-line adhesive station, and the in-line flexo station shall not exceed 22.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in Section B – Facility-Wide Terms and Conditions and d)(10) above.

c. Emission Limitation:

forty percent VOC by volume of the coating and ink, excluding water and exempt solvents or twenty-five percent VOC by volume of the volatile matter in the coating and ink

Applicable Compliance Method:

Compliance with the allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in d)(8) above

OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

d. Emission Limitation:

a control (destruction) efficiency which is at least 95 percent, by weight, for VOC

Applicable Compliance Method:

Compliance with the allowable control (destruction) efficiency for VOC above shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures and test methods as outlined in f)(1) above.

e. Emission Limitation:

a capture efficiency which is at least 90 percent, by weight, for VOC

Applicable Compliance Method:

Compliance with the allowable capture efficiency for VOC above shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures and test methods as outlined in f)(1) above.

f. Emission Limitation:

0.28 pound of NO<sub>x</sub> per hour

Applicable Compliance Method:

Compliance with the hourly NO<sub>x</sub> emission limitation above shall be demonstrated by multiplying the NO<sub>x</sub> emission factor of 100 pounds of NO<sub>x</sub> emissions per million cubic feet of natural gas fired\* by the maximum hourly natural gas usage.

\*The NO<sub>x</sub> emission factor is from AP-42, 5th edition, Table 1.4-1, dated 7/98

g. Emission Limitation:

0.23 pound of CO per hour

Applicable Compliance Method:

Compliance with the hourly CO emission limitation above shall be demonstrated by multiplying the CO emission factor of 84 pounds of CO emissions per million cubic feet of natural gas fired\* by the maximum hourly natural gas usage.

\*The CO emission factor is from AP-42, 5th edition, Table 1.4-1, dated 7/98

h. Emission Limitation:

0.02 pound of PE per hour

Applicable Compliance Method:

Compliance with the hourly PE limitation above shall be demonstrated by multiplying the PE factor of 7.6 pounds of PE per million cubic feet of natural gas fired\* by the maximum hourly natural gas usage.

\*The PE factor is from AP-42, 5th edition, Table 1.4-2, dated 7/98

i. Emission Limitation:

0.002 pound of SO<sub>2</sub> per hour

Applicable Compliance Method:

Compliance with the hourly SO<sub>2</sub> emission limitation above shall be demonstrated by multiplying the SO<sub>2</sub> emission factor of 0.6 pound of SO<sub>2</sub> emissions per million cubic feet of natural gas fired\* by the maximum hourly natural gas usage.

\*The SO<sub>2</sub> emission factor is from AP-42, 5th edition, Table 1.4-2, dated 7/98

j. Emission Limitations

1.20 tons of NO<sub>x</sub> per year

1.01 tons of CO per year

0.09 ton of PE per year

0.01 ton of SO<sub>2</sub> per year

Applicable Compliance Method:

Compliance with the annual emission limitations above shall be demonstrated by multiplying the hourly allowable emission limitation by 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly allowable emission limitations is maintained, compliance with the annual allowable emission limitations shall be assumed.

## g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant listed in OAC rule 3745-114-01 will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant listed in OAC rule 3745-114-01 that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.