



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

4/14/2010

Certified Mail

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

Facility ID: 1677000105  
Permit Number: P0106172  
County: Summit

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Administrative Permit Modification

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain 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 Title V permit 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 Kevin Boyce," 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 Region 5 *Via E-Mail Notification*  
Akron Regional Air Quality Management District





**FINAL**

**Division of Air Pollution Control  
Title V Permit  
for  
Bemis Company, Inc.**

Facility ID: 1677000105  
Permit Number: P0106172  
Permit Type: Administrative Permit Modification  
Issued: 4/14/2010  
Effective: 4/14/2010  
Expiration: 1/16/2013





Division of Air Pollution Control
Title V Permit
for
Bemis Company, Inc.

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 2
1. Federally Enforceable Standard Terms and Conditions ..... 3
2. Monitoring and Related Record Keeping and Reporting Requirements..... 3
3. Scheduled Maintenance..... 6
4. Risk Management Plans ..... 6
5. Title IV Provisions ..... 7
6. Severability Clause ..... 7
7. General Requirements ..... 7
8. Fees..... 8
9. Marketable Permit Programs..... 8
10. Reasonably Anticipated Operating Scenarios ..... 8
11. Reopening for Cause ..... 8
12. Federal and State Enforceability ..... 9
13. Compliance Requirements ..... 9
14. Permit Shield ..... 10
15. Operational Flexibility..... 11
16. Emergencies..... 11
17. Off-Permit Changes ..... 11
18. Compliance Method Requirements ..... 12
19. Insignificant Activities or Emissions Levels..... 12
20. Permit to Install Requirement ..... 12
21. Air Pollution Nuisance ..... 12
22. Permanent Shutdown of an Emissions Unit ..... 12
23. Title VI Provisions ..... 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only ..... 13
25. Records Retention Requirements Under State Law Only..... 14
26. Inspections and Information Requests ..... 14
27. Scheduled Maintenance/Malfunction Reporting ..... 14
28. Permit Transfers ..... 14



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations .....	14
B. Facility-Wide Terms and Conditions.....	16
C. Emissions Unit Terms and Conditions .....	23
1. K003, W & H I .....	24
2. K006, PC 3/LAM 2 .....	35
3. Emissions Unit Group - Group 1: K008, K016, .....	46
4. Emissions Unit Group - Group 2: K010, K020, .....	61



## Authorization

Facility ID: 1677000105  
Facility Description: Paper coating & laminated, packaging.  
Application Number(s): M0000766  
Permit Number: P0106172  
Permit Description: Administrative Permit Amendment to change the ownership and the name of the facility.  
Permit Type: Administrative Permit Modification  
Issue Date: 4/14/2010  
Effective Date: 4/14/2010  
Expiration Date: 1/16/2013  
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

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

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 Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Akron Regional Air Quality Management District. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director

## **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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations  
*(Authority for term: ORC 3704.036(A))*

**2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- 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 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.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c) The permittee shall submit required reports in the following manner:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or

local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.  
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed

adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*
- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Akron Regional Air Quality Management District.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### 3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### 4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.  
*(Authority for term: OAC rule 3745-77-07(A)(4))*

## 5. 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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## 6. Severability Clause

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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## 7. 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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. 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, reopening 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.
- f)

Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in



OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

- (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
- (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

**8. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

**9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

**10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

**11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.  
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

## 12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

## 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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.
- b) 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 paragraph (E) of OAC rule 3745-77-03.
  - (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.

- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.
    - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.  
(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

#### 14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.  
*(Authority for term: OAC rule 3745-77-07(F))*

## 15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).  
*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

## 16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.  
*(Authority for term: OAC rule 3745-77-07(G))*

## 17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*

## 18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

## 19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## 20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## 21. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## 22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible 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 responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that

emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.  
(Authority for term: OAC rule 3745-77-01)

### 23. Title VI Provisions

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.  
(Authority for term: OAC rule 3745-77-01(H)(11))

### 24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

*(Authority for term: OAC rule 3745-77-07(C))*

**27. 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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of 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 emissions unit(s) that is (are) served by such control system(s).

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **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) 1.h) below.

b) Bemis Company, Inc. requested to restrict the emissions of any individual Hazardous Air Pollutant (HAP) to 9.9 tons per rolling, 12-month period, the emissions of total combined HAPs to 24.9 tons per rolling, 12-month period, and the emissions of volatile organic compounds (VOC) to 358.9 tons per rolling, 12-month period. The permittee proposed these emission limits to avoid PSD permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Bemis Company, Inc., has accepted these emission limits as a facility-wide caps on emissions from emissions units K003, K006, K008, K010, K016, K020, T001, T002, and T003, combined.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(A)(1)]

c) In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for emissions units K003, K006, K008, K010, K016, K020, T001, T002, and T003, combined:

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

(1) For emissions units with control equipment (K003, K006, K008, K010, K016, and K020), the permittee shall collect and record the following information:

- a. the name and identification of each coating;
- b. the VOC content of each coating in weight percent;
- c. the individual HAP content for each HAP of each coating, in weight percent;
- d. the total pounds of each coating employed;
- e. the name and identification of each solvent\* employed;
- f. the VOC content of each solvent, in weight percent;
- g. the individual HAP content for each HAP of each solvent, in weight percent;
- h. the total pounds of each solvent employed;
- i. the total uncontrolled individual HAP emissions for each HAP for all the coatings and solvents employed, in tons per month (for each HAP, the sum of c)(1)c. divided by 100 times c)(1)d. for each coating plus the sum of c)(1)g. divided by 100 times c)(1)h. for each solvent, divided by 2000);
- j. the uncontrolled total combined HAPs emissions for all the coatings and solvents employed, in tons per month (the sum of the individual HAP emissions in c)(1)i.);
- k. the total uncontrolled VOC accounted for in all coatings and solvents employed, in tons per month (the sum of c)(1)b. divided by 100 times c)(1)d. for each coating plus the sum of c)(1)f. divided by 100 times c)(1)h. for each solvent, divided by 2000);

- l. the total number of coating waste drums;
- m. the total amount of VOC accounted for in the coating waste drums, in tons per month;
- n. the total uncontrolled VOC emissions, in tons per month ( c)(1)k. minus c)(1)m.);
- o. the linear feet of material produced by each emissions unit;
- p. the total linear feet of material produced by all of emissions units that employ control equipment;
- q. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the total uncontrolled individual HAP emissions for each HAP for each emissions unit, in tons per month (for each emissions unit c)(1)o. divided by c)(1)p. and then multiplied by c)(1)i.);
- r. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the uncontrolled total combined HAPs emissions for each emissions unit, in tons per month (for each emissions unit c)(1)o. divided by c)(1)p. and then multiplied by c)(1)j.);
- s. the total VOC emissions for each emissions unit, in tons per month (for each emissions unit c)(1)o. divided by c)(1)p. and then multiplied by c)(1)n.);
- t. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate for each emissions unit the controlled individual HAP emission rate for all coatings and solvents, in tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
- u. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate for each emissions unit the controlled total combined HAPs emission rate for all coatings and solvents, in tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
- v. for each emissions unit, the calculated, controlled VOC emission rate for all coatings and solvents, in tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
- w. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the total controlled individual HAP emission rate for all the emissions

units (sum all the calculated, controlled individual HAP emission rate for each emissions unit from c)(1)t.);

- x. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the controlled total combined HAPs emission rate for all the emissions units (sum all the calculated, controlled total combined HAPs emission rate for each emissions unit from c)(1)u.); and
- y. the total calculated, controlled VOC emission rate for all the emissions units (sum all the calculated, controlled VOC emission rate for each emissions unit from c)(1)v.).

\*Solvent is defined as cleanup material and coating thinning material.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- (2) For emissions units with control equipment but vent complying coatings to atmosphere (K010 and K020), the permittee shall collect and record the following information for the coatings that are vented to atmosphere:
  - a. the name and identification of each coating;
  - b. the VOC content of each coating, in weight percent;
  - c. the individual HAP content for each HAP of each coating, in weight percent;
  - d. the total pounds of each coating employed;
  - e. the name and identification of each solvent\* employed;
  - f. the VOC content of each solvent, in weight percent;
  - g. the individual HAP content for each HAP of each solvent, in weight percent;
  - h. the total pounds of each solvent employed;
  - i. the total uncontrolled individual HAP emissions for each HAP for all coatings and solvents employed, in tons per month (for each HAP, the sum of c)(2)c. divided by 100 times c)(2)d. for each coating plus the sum of c)(2)g. divided by 100 times c)(2)h. for each solvent, divided by 2000);
  - j. the uncontrolled total combined HAPs emissions for all coatings and solvents employed, in tons per month (the sum of the individual HAP emissions in c)(2)i.); and
  - k. the total uncontrolled VOC emissions for all coatings and solvents employed, in tons per month (the sum of c)(2)b. divided by 100 times c)(2)d. for each coating plus the sum of c)(2)f. divided by 100 times c)(2)h. for each solvent, divided by 2000).

\*Solvent is defined as cleanup material and coating thinning material.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- (3) For total facility emissions, the permittee shall collect and record the following information:
- a. the total uncontrolled individual HAP emissions for each HAP for the entire facility, in tons per month ( c)(1)i. plus c)(2)i. plus 0.04 ton per month\*);
  - b. the total uncontrolled combined HAPs emissions for the entire facility, in tons per month ( c)(1)j. plus c)(2)j. plus 0.15 ton per month\*);
  - c. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the controlled total individual HAP emissions for the entire facility, in tons per month ( c)(1)w. plus c)(2)i. plus 0.01 ton per month\*\*);
  - d. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the controlled total combined HAPs emissions for the entire facility, in tons per month ( c)(1)x. plus c)(2)j. plus 0.05 ton per month\*\*);
  - e. the total VOC emissions for the entire facility, in tons per month ( c)(1)y. plus c)(2)k. plus 0.25 ton per month\*\*\*\* plus 0.018 ton per month\*\*\*);
  - f. the permittee shall record the rolling, 12-month summation of the monthly uncontrolled emissions of each individual HAP for the entire facility for each calendar month;
  - g. the permittee shall record the rolling, 12-month summation of the monthly uncontrolled emissions of total combined HAPs for the entire facility for each calendar month;
  - h. the permittee shall record the rolling, 12-month summation of the monthly emissions of VOC for the entire facility for each calendar month;
  - i. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall record the rolling, 12-month summation of the monthly controlled emissions of each individual HAP for the entire facility for each calendar month; and
  - j. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall record the rolling, 12-month summation of the monthly controlled emissions of total combined HAPs for the entire facility for each calendar month.

\*The uncontrolled HAP/HAPs emissions from the natural gas combustion from the incinerator (oxidizer) and ovens.

\*\*The controlled HAP/HAPs emissions from the natural gas combustion from the incinerator (oxidizer) and ovens.

\*\*\*The controlled VOC emissions from the natural gas combustion from the incinerator (oxidizer) and ovens.



\*\*\*\* The potential to emit for VOC for the three storage tanks is 3.0 tons per year (0.25 ton per month). The storage tanks do not store any HAP.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- d) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for VOC, individual HAP, and total combined HAPs. The deviation reports shall be submitted in accordance with the requirements specified in Section A – Standard Term and Condition 2.c)(2).

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- e) The permittee shall submit annual reports that specify the following information:
- (1) for the entire facility, the rolling, 12-month summations of monthly emissions of VOC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
  - (2) for each emissions unit, the VOC emission rate, in tons per year.

The annual reports shall be submitted by January 31 of each year, and shall cover the records for the previous calendar year (January through December). This reporting requirement may be satisfied by including and identifying the specific emission data (VOC, individual HAPs, and combined HAPs) for each emissions unit in the facility's annual Fee Emission Report.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- f) Compliance with the emission limitations in 1.b) above shall be determined in accordance with the following methods:

- (1) Emission Limitations:  
9.9 tons of HAP per rolling, 12-month period  
24.9 tons of HAPs per rolling, 12-month period  
358.9 tons of VOC per rolling, 12-month period

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitations above in accordance with the record keeping requirements established in 1.c)(1), 1.c)(2), and 1.c)(3) above. 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 and solvents.

[Authority for term: OAC rule 3745-31-05 and OAC rule 3745-77-07(C)(1)]

- g) The following insignificant emissions units are located at this facility:  
T001 - Tank 1 (PTI 16-957);

T002 - Tank 2 (PTI 16-957); and

T003 - Tank 3 (PTI 16-957).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally – approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

[Authority for term: OAC rule 3745-77-07(A)(13)]

- h) The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

Z002 - Curl Oven 1;

Z003 - Curl Oven 2;

Z004 - Micro Clean Sand Blast Cleaner;

Z005 - Micro Clean Hand Blast Cleaner;

Z007 - Flammable Solvent Recovery System; and

Z008 - Plate Room Solvent Recovery System 1.

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



1. K003, W & H I

Operations, Property and/or Equipment Description:

6 - color flexographic printing press/outboard rotogravure station - WH-1

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 operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-31-05(A)(3), OAC rule 3745-21-09(Y)(1)(b), and 40 CFR Part 64.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The VOC emissions from this emissions unit shall be vented to the catalytic incinerator when the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)].

d) 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 incinerator's catalyst bed during operation of this emissions unit, including periods of

startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the following information for each day when the catalytic incinerator is in use:

- a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.
- b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the incinerator's temperature chart to determine the temperature differential across the catalyst bed.
- c. A log of operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit. 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 shall be logged as to the date and time.

Whenever the monitored values for the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, deviate from the value specified below, 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 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 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, 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 average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, cannot be less than 481 degrees Fahrenheit or cannot be more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.

The value above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by the Director. The permittee may request revisions to the value above based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (2) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic incinerator, as determined by the catalyst activity testing, shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during the catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (3) This emissions unit shall be operated with an interlock system that prevents the operation of this emissions unit when materials not meeting the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii) are utilized and the catalytic incinerator is not in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (4) All ventilation fans associated with this emissions unit and the catalytic incinerator shall be in operation at all times when this emissions unit is in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (5) 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 and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii), to ensure that all captured VOC emissions are vented to the catalytic incinerator. 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (6) 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 incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall perform an inspection of the catalytic incinerator, 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, 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. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in f)(5) below, a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in f)(5) below. The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (8) The permittee shall maintain a record of the results of each annual and weekly inspection of the catalytic incinerator, as well as the results of each catalyst activity test required in f)(5) below.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (9) 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 incinerator 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 process line be immediately shut down and remain shut down until the problem has been corrected.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (10) The permittee shall utilize an anemometer, or any other equivalent measurement method approved by the Ohio EPA, to measure the total exhaust flow rate from this emissions unit at the outlet of this emissions unit with a minimum frequency of once per calendar quarter, while this emissions unit is in operation. The anemometer, or other equivalent measurement method approved by the Ohio EPA, 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. Units shall be in standard cubic feet per minute. The velocity measuring device shall be capable of accurately measuring the desired parameter.

Whenever the monitored value for the air flow rate at the outlet of this emissions unit deviates from the value specified below, 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 to determine the cause of a deviation, the permittee shall take prompt corrective action 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, immediately after the corrective action, the total exhaust flow rate from this emissions unit, 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 air flow rate at the outlet of this emissions unit when the emissions unit is in operation can be no less than 3,228 standard cubic feet per minute (scfm) or no less than the average air flow rate measured/documented during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (11) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (12) Each calendar month, the permittee shall inspect the operational condition and integrity of 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 incinerator 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.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (13) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for the catalytic incinerator controlling this emissions unit include the average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, the air flow rate at the catalytic incinerator inlet, the catalyst activity testing, and an interlock system. When the

performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and complying with the reporting requirements specified in e) below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. In addition to monitoring the temperature of the exhaust gases immediately before the catalyst bed and the exhaust flow rate at the outlet of this emissions unit, and testing of the catalyst activity, and operating an interlock system, the permittee also has an inspection/preventative maintenance program for the catalytic incinerator. Based on the results of the inspection/preventative maintenance program, repairs to the catalytic incinerator shall be made as needed. If the current CAM indicators and/or the catalytic incinerator system inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(d) and 64.7].

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 incinerator. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance;
  - c. a summary of the operating time for the capture (collection) system, control device, monitoring equipment, and the emissions unit;
  - d. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - e. an identification of each incident of deviation described in (a) 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 (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-21-09(B)(3)(m), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

NOTE: A temperature difference across the catalyst bed that was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance is not necessarily indicative of a violation of the control efficiency limitation for VOC.

- (3) The permittee shall submit reports that include the results of the catalyst activity tests required in f)(5) below. These reports shall be submitted within 45 days after each catalyst activity test is performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following events when this emissions unit is utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii):

- a. each time the interlock system does not stop the operation of this emissions unit when the catalytic incinerator is not in operation; and
- b. each time any bypass dampers, actuator pins, and/or associated motors were not in the correct position and in good operating condition and/or any of the hooding or ductwork comprising the VOC emission capture system contained leaks or holes that would permit the escape of the captured VOC emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (5) 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 incinerator interlock system, based on the records maintained pursuant to d)(9) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (6) The permittee shall submit quarterly deviation (excursion) reports that identify the 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).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (7) The permittee shall submit quarterly deviation (excursion) reports that identify the findings of any inspection that determined the external structural integrity of the catalytic incinerator has been jeopardized and it no longer operates as designed. These reports shall include information required by 40 CFR Part 64.9(a).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (8) The permittee shall submit annual reports that summarize the results of each annual inspection of the internal integrity of the catalytic incinerator, based on records maintained pursuant to d)(8) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (9) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (10) The permittee shall submit quarterly reports that identify the following information concerning the operation of the capture (collection) system during the operation of this emissions unit:

- a. each period of time when the air flow rate at the outlet of this emissions unit was less than the acceptable value;
- b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the air flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

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

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months prior to permit expiration.

- b. The emission testing shall be conducted to demonstrate compliance with the 90 percent, by weight, control efficiency limitation for VOC. (Capture efficiency testing to demonstrate compliance with the applicable 65 percent capture efficiency limitation was performed on January 29, 1999.)
- c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. 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.
- e. 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.)
- f. The control 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.
- g. During each capture efficiency test run, the permittee shall measure the total exhaust flow rate from the outlet of this emissions unit, in scfm.
- h. During each control 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.

[Authority for term: OAC rule 3745-21-10(C) and OAC rule 3745-77-07(C)(1)]

- (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).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described d)(7) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) Compliance with the emission limitations and control and capture efficiency requirements in b)(1) above shall be determined in accordance with the following methods:

a. Emission Limitation:

A control efficiency which is at least 90 percent, by weight, for VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

A capture efficiency which is at least 65 percent, by weight, for VOC

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
  - (1) None.



2. K006, PC 3/LAM 2

Operations, Property and/or Equipment Description:

single station coater/laminator - LAM 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 operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Row ID, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-31-05(A)(3) and OAC rule 3745-21-09(B)(6).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The VOC emissions from this emissions unit shall be vented to the catalytic incinerator when the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)].

## d) 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 incinerator's catalyst bed during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the following information for each day when the catalytic incinerator is in use:
  - a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the incinerator's temperature chart to determine the temperature differential across the catalyst bed.
  - c. A log of operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit. 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 shall be logged as to the date and time.

Whenever the monitored values for the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, deviate from the value specified below, 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 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 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, 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 average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in

operation, cannot be less than 481 degrees Fahrenheit or cannot be more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.

The value above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by the Director. The permittee may request revisions to the value above based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (2) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic incinerator, as determined by the catalyst activity testing, shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during the catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (3) This emissions unit shall be operated with an interlock system that prevents the operation of this emissions unit when materials not meeting the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii) are utilized and the catalytic incinerator is not in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (4) All ventilation fans associated with this emissions unit and the catalytic incinerator shall be in operation at all times when this emissions unit is in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (5) 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 and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii), to ensure that all captured VOC emissions are vented to the catalytic incinerator. 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.3]

- (6) 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 incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall perform an inspection of the catalytic incinerator, 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, 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. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in f)(5) below, a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in f)(5) below. The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (8) The permittee shall maintain a record of the results of each annual and weekly inspection of the catalytic incinerator, as well as the results of each catalyst activity test required in f)(5) below.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (9) 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 incinerator 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 process line be immediately shut down and remain shut down until the problem has been corrected.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (10) The permittee shall utilize an anemometer, or any other equivalent measurement method approved by the Ohio EPA, to measure the total exhaust flow rate from this emissions unit at the outlet of this emissions unit with a minimum frequency of once per calendar quarter, while this emissions unit is in operation. The anemometer, or other equivalent measurement method approved by the Ohio EPA, 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. Units shall be in standard cubic feet per minute. The velocity measuring device shall be capable of accurately measuring the desired parameter.

Whenever the monitored value for the air flow rate at the outlet of this emissions unit deviates from the value specified below, 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 to determine the cause of a deviation, the permittee shall take prompt corrective action 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, immediately after the corrective action, the total exhaust flow rate from this emissions unit, 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 air flow rate at the outlet of this emissions unit when the emissions unit is in operation can be no less than 7,264 standard cubic feet per minute (scfm) or no less than the average air flow rate measured/documented during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (11) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (12) Each calendar month, the permittee shall inspect the operational condition and integrity of 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 incinerator 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.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (13) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for the catalytic incinerator controlling this emissions unit include the average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, the air flow rate at the catalytic incinerator inlet, the catalyst activity testing, and an interlock system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and complying with the reporting requirements specified in e) below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. In addition to monitoring the temperature of the exhaust gases immediately before the catalyst bed and the exhaust flow rate at the outlet of this emissions unit, and testing of the catalyst activity, and operating an interlock system, the permittee also has an inspection/preventative maintenance program for the catalytic incinerator. Based on the results of the inspection/preventative maintenance program, repairs to the catalytic incinerator shall be made as needed. If the current CAM indicators and/or the catalytic incinerator system inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(d) and 64.7]

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 incinerator. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance;
  - c. a summary of the operating time for the capture (collection) system, control device, monitoring equipment, and the emissions unit;

- d. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- e. an identification of each incident of deviation described in (a) 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 (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-21-09(B)(3)(m), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

NOTE: A temperature difference across the catalyst bed that was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance is not necessarily indicative of a violation of the control efficiency limitation for VOC.

- (3) The permittee shall submit reports that include the results of the catalyst activity tests required in f)(5) below. These reports shall be submitted within 45 days after each catalyst activity test is performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following events when this emissions unit is utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745- 21-09(Y)(1)(a)(i) or (ii):
  - a. each time the interlock system does not stop the operation of this emissions unit when the catalytic incinerator is not in operation; and
  - b. each time any bypass dampers, actuator pins, and/or associated motors were not in the correct position and in good operating condition and/or any of the hooding or ductwork comprising the VOC emission capture system contained leaks or holes that would permit the escape of the captured VOC emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (5) 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 incinerator interlock system, based on the records maintained pursuant to d)(9) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (6) The permittee shall submit quarterly deviation (excursion) reports that identify the 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).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (7) The permittee shall submit quarterly deviation (excursion) reports that identify the findings of any inspection that determined the external structural integrity of the catalytic incinerator has been jeopardized and it no longer operates as designed. These reports shall include information required by 40 CFR Part 64.9(a).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (8) The permittee shall submit annual reports that summarize the results of each annual inspection of the internal integrity of the catalytic incinerator, based on records maintained pursuant to d)(8) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (9) The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (10) The permittee shall submit quarterly reports that identify the following information concerning the operation of the capture (collection) system during the operation of this emissions unit:

- a. each period of time when the air flow rate at the outlet of this emissions unit was less than the acceptable value;
- b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the air flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

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

## f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the 90 percent, by weight, control efficiency limitation for VOC. (Capture efficiency testing to demonstrate compliance with the applicable 81 percent overall control efficiency limitation was performed on January 23-26, 1999.)
  - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - d. 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.
  - e. 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.)
  - f. The control 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.
  - g. During each capture efficiency test run, the permittee shall measure the total exhaust flow rate from the outlet of this emissions unit, in scfm.
  - h. During each control 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).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in d)(7) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) Compliance with the emission limitations and control and capture efficiency requirements in b)(1) above shall be determined in accordance with the following methods:

a. Emission Limitation:

The control equipment shall have an efficiency of not less than ninety per cent, by weight, for the VOC emissions vented to the control equipment.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The capture and control equipment shall provide not less than an eighty one per cent reduction, by weight, in the overall VOC emissions from the coating line.



Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
  - (1) None.



**3. Emissions Unit Group - Group 1: K008, K016,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
K008	6-color flexographic printing press with in-line lamination and a backside printing gravure station - WH-2
K016	8-color flexographic printing press with a one color outboard flexographic station - PC VISION

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) d)(10), d)(11), and d)(12) below.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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) (PTI 16-02184)	For emissions unit K008: 85.0 pounds of volatile organic compounds (VOC) per hour  For emissions unit K016: 34.0 pounds of VOC per hour  See b)(2)a. below.  For emissions units K008 and K016: 109 tons of VOC per year from each emissions unit  For emissions unit K008 and K016, the printing lines shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and a capture efficiency which is at least 78 percent, by weight, for VOC.
b.	OAC rule 3745-21-09(Y)(1)(b)	The emission control requirements based on this applicable rule are less stringent than or equivalent to the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
c.	40 CFR Part 64	See c)(2) through c)(7), d)(2) through

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		d)(9), and e)(2) through e)(8), and e)(10) below.

(2) Additional Terms and Conditions

- a. The hourly VOC emission limitations are based on the emissions units' potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limitations.

c) Operational Restrictions

- (1) The VOC emissions from the emissions units listed above shall be vented to the catalytic incinerator when the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

- (2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit(s) controlled by the catalytic incinerator is/are in operation, shall not be less than 481 degrees Fahrenheit or shall not be 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (3) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic incinerator, as determined by the catalyst activity testing, shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during the catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (4) The emissions units listed above shall be operated with an interlock system that prevents the operation of the emissions unit when materials not meeting the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii) are utilized and the catalytic incinerator is not in operation.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (5) All ventilation fans associated with these emissions units and the catalytic incinerator shall be in operation at all times when the emissions unit(s) is/are in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii).

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (6) All bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when the emissions unit(s) is/are in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii), to ensure that all captured VOC emissions are vented to the catalytic incinerator. Also, all the hooding and ductwork comprising the VOC emission capture system for the emissions units listed above shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (7) The average, total exhaust flow rate from emissions units K008 and K016 to the catalytic incinerator shall not be less than 3,228 standard cubic feet per minute (scfm) and 1,769 scfm, respectively, or shall not be less than the exhaust flow rate documented during the last emission tests that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3].

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records documenting any time periods when either of the emissions units listed above were in operation and the emissions from the emissions unit were not vented to the catalytic incinerator.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the following information for each day when the catalytic incinerator is in use:
- a. All 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. All 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the incinerator's temperature chart to determine the temperature differential across the catalyst bed.

- c. A log of operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions units listed above. 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 either of the emissions units listed above shall be logged as to the date and time.

Whenever the monitored values for the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, deviate from the value specified in c)(2) above, 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 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 value specified in c)(2) above, 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, 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.

The value in c)(2) above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by the Director. The permittee may request revisions to the value above based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the emissions units listed above. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-21-09(B)(3)(I), OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.3]

- (3) The permittee shall perform an inspection of the catalytic incinerator, 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, 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. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in f)(5) below, a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in f)(5) below. The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (4) The permittee shall maintain a record of the results of each annual and weekly inspection of the catalytic incinerator, as well as the results of each catalyst activity test required in f)(5) below.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (5) On an annual basis, the permittee shall inspect the electronics of the interlock system used for the emissions units listed above to verify the signals between the catalytic incinerator 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 process line be immediately shut down and remain shut down until the problem has been corrected.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (6) The permittee shall utilize an anemometer, or any other equivalent measurement method approved by the Ohio EPA, to measure the total exhaust flow rate from the emissions units listed above at the outlet of the emissions unit with a minimum frequency of once per calendar quarter, while the emissions unit is in operation. The anemometer, or other equivalent measurement method approved by the Ohio EPA, 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. Units shall be in standard cubic feet per minute. The velocity measuring device shall be capable of accurately measuring the desired parameter.

Whenever the monitored value for the air flow rate at the outlet of either of the emissions units listed above deviates from the value(s) specified in c)(7) above, 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 to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the capture (collection) system within the acceptable value(s) specified in c)(7) above, 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, immediately after the corrective action, the total exhaust flow rate from the emissions unit, 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.

The values specified in c)(7) above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the values based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the emissions units listed above. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (7) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (8) Each calendar month, the permittee shall inspect the operational condition and integrity of 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 incinerator 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (9) The CAM plan for the emissions units listed above has been developed for VOC emissions. The CAM performance indicators for the catalytic incinerator controlling the emissions units listed above include the average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, the air flow rate at the catalytic incinerator inlet, the catalyst activity testing, and an interlock system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and complying with the reporting requirements specified in e) below. The emissions units listed above and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. In addition to monitoring the temperature of the exhaust gases immediately before the catalyst bed and the exhaust flow rate at the outlet of the emissions units listed above, and testing of the catalyst activity, and operating an interlock system, the permittee also has an inspection/preventative maintenance program for the catalytic incinerator. Based

on the results of the inspection/preventative maintenance program, repairs to the catalytic incinerator shall be made as needed. If the current CAM indicators and/or the catalytic incinerator system inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(d) and 64.7]

- (10) The permit to install for these emissions units (K008 and K016) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to these emissions units for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: n-propyl alcohol

TLV (mg/m<sup>3</sup>): 492

Maximum Hourly Emission Rate (lbs/hr): 194.48\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 11,628

MAGLC (ug/m<sup>3</sup>): 11,714

Pollutant: n-propyl acetate

TLV (mg/m<sup>3</sup>): 835

Maximum Hourly Emission Rate (lbs/hr): 74.26\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 4,505

MAGLC (ug/m<sup>3</sup>): 19,881

Pollutant: isopropyl alcohol

TLV (mg/m<sup>3</sup>): 983

Maximum Hourly Emission Rate (lbs/hr): 100.96\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 6,222

MAGLC (ug/m<sup>3</sup>): 23,405

Pollutant: methyl ethyl ketone

TLV (mg/m<sup>3</sup>): 590

Maximum Hourly Emission Rate (lbs/hr): 43.90\*\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,081

MAGLC (ug/m3): 14,048

Pollutant: ethyl alcohol

TLV (mg/m3): 1880

Maximum Hourly Emission Rate (lbs/hr): 194.48\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12,419

MAGLC (ug/m3): 44,762

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 276.98\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18,351

MAGLC (ug/m3): 34,286

\*Combined increase in the allowable emission rate multiplied by the maximum air toxic pollutant weight ratio for emissions units K008, K010, K013, K015, K016, K017, K018, and K020.

\*\*Combined increase in the allowable emission rate multiplied by the maximum air toxic pollutant weight ratio for emissions units K008, K010, K013, K015, K016, and K020.

- (11) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, 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");
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- (12) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (13) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #16-02184, issued on March 14, 2006: d)(2), d)(3), and d)(6). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC 3745-77-07(A)(3)(a)(ii)].

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify any time periods when either of the emissions units listed above were in operation and the emissions from the emissions unit(s) were not vented to the catalytic incinerator. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) 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 listed above:

- a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units listed above were in compliance;
- b. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions units listed above were in compliance;
- c. a summary of the operating time for the capture (collection) system, control device, monitoring equipment, and the emissions units listed above;
- d. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- e. an identification of each incident of deviation described in (a) 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 (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-21-09(B)(3)(m), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

NOTE: A temperature difference across the catalyst bed that was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions units listed above were in compliance is not necessarily indicative of a violation of the control efficiency limitation for VOC.

- (3) The permittee shall submit reports that include the results of the catalyst activity tests required in f)(5) below. These reports shall be submitted within 45 days after each catalyst activity test is performed.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following events when either emissions units listed above is utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii):
  - a. each time the interlock system does not stop the operation of the emissions unit when the catalytic incinerator is not in operation; and

- 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (5) 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 incinerator 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (6) The permittee shall submit quarterly deviation (excursion) reports that identify the 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).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (7) The permittee shall submit quarterly deviation (excursion) reports that identify the findings of any inspection that determined the external structural integrity of the catalytic incinerator has been jeopardized and it no longer operates as designed. These reports shall include information required by 40 CFR Part 64.9(a).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (8) The permittee shall submit annual reports that summarize the results of each annual inspection of the internal integrity of the catalytic incinerator, based on records maintained pursuant to d)(4) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (9) The permittee shall also submit annual reports that specify the total VOC emissions from the emissions units listed above for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (10) The permittee shall submit quarterly reports that identify the following information concerning the operation of the capture (collection) system during the operation of the emissions units listed above:

- a. each period of time when the air flow rate at the outlet of either emissions units was less than the acceptable value;
- b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

- c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the air flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

- (11) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 16-02184, issued on March 14, 2006: e)(2), e)(4), e)(5), and e)(10). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC 3745-77-07(A)(3)(a)(ii)].

f) **Testing Requirements**

- (1) The permittee shall conduct, or have conducted, emission testing for the emissions units listed above in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the 90 percent, by weight, control efficiency limitation for VOC. (Capture efficiency testing to demonstrate compliance with the applicable 78 percent capture efficiency limitation was performed on January 29, 1999 on emissions unit K003 which is an identical emissions unit to K008 and January 31 – February 1, 1999 for emissions unit K016)
  - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - d. 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.
  - e. 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.)

- f. The control 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.
- g. During each capture efficiency test run, the permittee shall measure the total exhaust flow rate from the outlet of this emissions unit, in scfm.
- h. During each control 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.

[Authority for term: OAC rule 3745-21-10(C), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]

- (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).

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in d)(3) 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (6) Compliance with the emission limitations and control and capture efficiency requirements in b)(1) above shall be determined in accordance with the following methods:

a. Emission Limitations:

For emissions unit K008: 85.0 pounds of VOC per hour

For emissions unit K016: 34.0 pounds of VOC per hour

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations shall be determined 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 (1-0.7\*).

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

\*overall control efficiency based on the capture efficiency requirement of 78%, by weight and the control efficiency requirement of 90%, by weight.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitations:

For emissions units K008 and K016: 109 tons of VOC per year from each emissions unit

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitations above shall be determined based upon the records required pursuant to Section B – Facility-Wide Term and Condition 1.c).

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

For emissions unit K008 and K016: a control efficiency which is at least 90 percent, by weight, for VOC.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

For emissions unit K008 and K016: a capture efficiency which is at least 78 percent, by weight, for VOC.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)].

g) Miscellaneous Requirements

(1) None.

**4. Emissions Unit Group - Group 2: K010, K020,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
K010	6-color flexographic printing press with a laminator and a backside printing station - WH-3
K020	10 color flexographic printing press with turboclean inking/washup system, in-line adhesive station, and two color in-line backside flexo station - WH-5

- 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) d)(12), d)(13), and d)(14) below.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operations(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. 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) (PTI 16-02184)	<p>For emissions unit K010: 222.0 pounds of volatile organic compounds (VOC) per hour</p> <p>For emissions unit K020: 124.0 pounds of VOC per hour</p> <p>See b)(2)a. below.</p> <p>For emissions units K010 and K020: 109 tons of VOC per year from each emissions unit</p> <p>For emissions unit K010, the printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and a capture efficiency which is at least 78 percent, by weight, for VOC.</p> <p>For emissions unit K020, the printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and a capture</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		efficiency which is at least 90 percent, by weight, for VOC.  For emissions units K010 and K020: When venting the VOC emissions from the laminator to the atmosphere, the volatile organic compound content of the coatings and inks shall not exceed forty percent VOC by volume of the coating or ink, excluding water and exempt solvents or twenty-five percent VOC by volume of the volatile matter in the coating or ink.
b.	OAC rule 3745-21-09(Y)(1)(a)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(Y)(1)(b)	The emission control requirements based on this applicable rule are less stringent than or equivalent to the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 64	See c)(5) through c)(10), d)(2) through d)(9), and e)(2) through e)(8), and e)(10) below.

(2) Additional Terms and Conditions

a. The hourly VOC emission limitations are based on the emissions units' potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limitations.

c) Operational Restrictions

(1) For emissions unit K010, the VOC emissions from the 6-color flexographic printing press and the backside printing station shall be vented to the catalytic incinerator when the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

(2) For emissions unit K020, the VOC emissions from the 10-color flexographic printing press and the backside printing stations shall be vented to the catalytic incinerator when the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

(3) For emissions units K010 and K020: When employing a coating on the laminator that meets the requirements of b)(1)a. above, the VOC emissions from the laminator may be vented to the atmosphere.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

- (4) For emissions units K010 and K020: When employing a coating on the laminator that does not meet the requirements of b)(1)a. above, the VOC emissions shall be vented to the catalytic incinerator.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

- (5) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit(s) is/are in operation, shall not be less than 481 degrees Fahrenheit or shall not be 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (6) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic incinerator, as determined by the catalyst activity testing, shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during the catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (7) The emissions units listed above shall be operated with an interlock system that prevents the operation of the emissions unit when materials not meeting the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii) are utilized and the catalytic incinerator is not in operation.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (8) All ventilation fans associated with these emissions units and the catalytic incinerator shall be in operation at all times when the emissions unit(s) is/are in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii).

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (9) All bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when the emissions unit(s) is/are in operation and utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745-21-09(Y)(1)(a)(i) or (ii), to ensure that all captured VOC emissions are vented to the catalytic incinerator. Also, all the hooding and ductwork comprising the VOC emission capture system for the emissions units listed above shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3]

- (10) The average, total exhaust flow rate from emissions unit K010 and K020 to the catalytic incinerator shall not be less than 8,235 standard cubic feet per minute (scfm) and 3,987 scfm, respectively, or shall not be less than the exhaust flow rate documented during the last emission tests that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(1), and 40 CFR Part 64.3].

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain records documenting any time periods when either of the emissions units listed above were in operation and the emissions from the emissions unit were not vented to the catalytic incinerator except for time periods when the emissions from the laminator are vented to the atmosphere as allowed b)(1) above and the emissions from the 6-color flexographic printing press and the backside printing press are vented to the catalytic incinerator and the emissions from the 10-color flexographic printing press and the backside printing presses are vented to the catalytic incinerator.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the following information for each day when the catalytic incinerator is in use:
  - a. All 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. All 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the incinerator's temperature chart to determine the temperature differential across the catalyst bed.
  - c. A log of operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions units listed above. 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 either of the emissions units listed above shall be logged as to the date and time.

Whenever the monitored values for the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, deviate from the value specified in c)(5) above, 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 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 value specified in c)(5) above, 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, 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.

The value in c)(5) above is effective for the duration of this permit, unless revisions are requested by the permittee and approved by the Director. The permittee may request revisions to the value above based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the emissions units listed above. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-21-09(B)(3)(I), OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.3]

- (3) The permittee shall perform an inspection of the catalytic incinerator, 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, 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. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in f)(5) below, a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in f)(5) below. The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (4) The permittee shall maintain a record of the results of each annual and weekly inspection of the catalytic incinerator, as well as the results of each catalyst activity test required in f)(5) below.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (5) On an annual basis, the permittee shall inspect the electronics of the interlock system used for the emissions units listed above to verify the signals between the catalytic incinerator 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 process line be immediately shut down and remain shut down until the problem has been corrected.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (6) The permittee shall utilize an anemometer, or any other equivalent measurement method approved by the Ohio EPA, to measure the total exhaust flow rate from the emissions units listed above at the outlet of the emissions unit with a minimum frequency of once per calendar quarter, while the emissions unit is in operation. The anemometer, or other equivalent measurement method approved by the Ohio EPA, 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. Units shall be in standard cubic feet per minute. The velocity measuring device shall be capable of accurately measuring the desired parameter.

Whenever the monitored value for the air flow rate at the outlet of either of the emissions units listed above deviates from the value specified in c)(10) above, 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 to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the capture (collection) system within the acceptable value specified in c)(10) above, 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 total period of time (in minutes) during which there was a deviation, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time, immediately after the corrective action, the total exhaust flow rate from the emissions unit, 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.

The value specified in c)(10) above is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the emissions units listed above. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.3, 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (7) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (8) Each calendar month, the permittee shall inspect the operational condition and integrity of 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 incinerator 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), 40 CFR Part 64.7(c), and 40 CFR Part 64.9(b)]

- (9) The CAM plan for the emissions units above has been developed for VOC emissions. The CAM performance indicators for the catalytic incinerator controlling the emissions units listed above include the average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, the air flow rate at the catalytic incinerator inlet, the catalyst activity testing, and an interlock system. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and complying with the reporting requirements specified in e) below. The emissions units listed above and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. In addition to monitoring the temperature of the exhaust gases immediately before the catalyst bed and the exhaust flow rate at the outlet of the emissions units listed above, and testing of the catalyst activity, and operating an interlock system, the permittee also has an inspection/preventative maintenance program for the catalytic incinerator. Based on the results of the inspection/preventative maintenance program, repairs to the catalytic incinerator shall be made as needed. If the current CAM indicators and/or the catalytic

incinerator system inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(d) and 64.7]

- (10) For emissions units K010 and K020, the permittee shall collect and record the following information each month for the coatings employed on the laminator 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.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a Permit to Install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

[Authority for term: OAC rule 3745-21-09(B)(3)(f), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]

- (11) For emissions units K010 and K020, if a job specification calls for a coating to be employed on the laminator that does not comply with the requirements of b)(1) 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 incinerator; and
  - c. the personnel initials.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (12) The permit to install for these emissions units (K010 and K020) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to these emissions units for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: n-propyl alcohol

TLV (mg/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 194.48\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11,628

MAGLC (ug/m3): 11,714

Pollutant: n-propyl acetate

TLV (mg/m3): 835

Maximum Hourly Emission Rate (lbs/hr): 74.26\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4,505

MAGLC (ug/m3): 19,881

Pollutant: isopropyl alcohol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 100.96\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6,222

MAGLC (ug/m3): 23,405

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 43.90\*\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,081

MAGLC (ug/m3): 14,048

Pollutant: ethyl alcohol

TLV (mg/m3): 1880

Maximum Hourly Emission Rate (lbs/hr): 194.48\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12,419

MAGLC (ug/m3): 44,762

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 276.98\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18,351

MAGLC (ug/m3): 34,286

\*Combined increase in the allowable emission rate multiplied by the maximum air toxic pollutant weight ratio

for emissions units K008, K010, K013, K015, K016, K017, K018, and K020.

\*\*Combined increase in the allowable emission rate multiplied by the maximum air toxic pollutant weight ratio for emissions units K008, K010, K013, K015, K016, and K020.

(13) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, 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");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

(14) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #16-02184, issued on March 14, 2006: d)(2), d)(3), and d)(6). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC 3745-77-07(A)(3)(a)(ii)].

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify any time periods when either of the emissions units listed above were in operation and the emissions from the emissions unit(s) were not vented to the catalytic incinerator except for time periods when the emissions from the laminator(s) are vented to the atmosphere as allowed by b)(1) above and the emissions from the 6-color flexographic printing press and the backside printing press are vented to the catalytic incinerator and the emissions from the 10-color flexographic printing press and the backside printing presses are vented to the catalytic incinerator. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (2) 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 listed above:
- a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) was less than 481 degrees Fahrenheit or was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 41 degrees Fahrenheit or was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance;
  - c. a summary of the operating time for the capture (collection) system, control device, monitoring equipment, and the emissions units listed above;

- d. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- e. an identification of each incident of deviation described in (a) 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 (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-21-09(B)(3)(m), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

NOTE: A temperature difference across the catalyst bed that was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions units listed above were in compliance is not necessarily indicative of a violation of the control efficiency limitation for VOC.

- (3) The permittee shall submit reports that include the results of the catalyst activity tests required in f)(5) above. These reports shall be submitted within 45 days after each catalyst activity test is performed.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following events when either emissions units listed above is utilizing materials that do not meet the VOC content limitations specified in OAC rule 3745- 21-09(Y)(1)(a)(i) or (ii):
  - a. each time the interlock system does not stop the operation of the emissions unit when the catalytic incinerator is not in operation; and
  - 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (5) 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 incinerator 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.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1), and 40 CFR Part 64.9(a)]

- (6) The permittee shall submit quarterly deviation (excursion) reports that identify the 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).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (7) The permittee shall submit quarterly deviation (excursion) reports that identify the findings of any inspection that determined the external structural integrity of the catalytic incinerator has been jeopardized and it no longer operates as designed. These reports shall include information required by 40 CFR Part 64.9(a).

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (8) The permittee shall submit annual reports that summarize the results of each annual inspection of the internal integrity of the catalytic incinerator, based on records maintained pursuant to d)(4) above. These reports shall be submitted within 45 days after each inspection is performed.

[Authority of term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64.9(a)]

- (9) The permittee shall also submit annual reports that specify the total VOC emissions from the emissions units listed above for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (10) The permittee shall submit quarterly reports that identify the following information concerning the operation of the capture (collection) system during the operation of the emissions units listed above:

- a. each period of time when the air flow rate at the outlet of either emissions units was less than the acceptable value;
- b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the air flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

- (11) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to

Install # 16-02184, issued on March 14, 2006: e)(2), e)(4), e)(5), and e)(10). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC 3745-77-07(A)(3)(a)(ii)].

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for the emissions units listed above in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the 90 percent, by weight control efficiency limitation for VOC. (Capture efficiency testing to demonstrate compliance with the applicable 78 percent capture efficiency limitation for emissions unit K010 was performed on January 27-28, 1999 and with the applicable 90 percent efficiency limitation for emissions unit K020 was performed on March 14, 2005.)
  - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - d. 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.
  - e. 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.)
  - f. The control 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.
  - g. During each capture efficiency test run, the permittee shall measure the total exhaust flow rate from the outlet of the emissions units listed above, in scfm.
  - h. During each control 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.

[Authority for term: OAC rule 3745-21-10(C), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]

- (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).

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in d)(3) 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

- (6) Compliance with the emission limitations and control and capture efficiency requirements in b)(1) above shall be determined in accordance with the following methods:

- a. Emission Limitations:

For emissions unit K010: 222.0 pounds of VOC per hour

For emissions unit K020: 124.0 pounds of VOC per hour

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations shall be determined 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 (1-0.7\*).

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

\*overall control efficiency based on the capture efficiency requirement of 78%, by weight and the control efficiency requirement of 90%, by weight.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

b. Emission Limitations:

For emissions units K010 and K020: 109 tons of VOC per year from each emissions unit

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitations shall be determined based upon the records required pursuant to Section B – Facility-Wide Term and Condition 1.c).

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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:

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.

[Authority for term: OAC rule 3745-21-10(B), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

For emissions units K010 and K020: A control efficiency which is at least 90 percent, by weight, for VOC.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e. Emission Limitations:

For emissions unit K010: A capture efficiency which is at least 78 percent, by weight, for VOC.

For emissions unit K020: A capture efficiency which is at least 90 percent, by weight, for VOC.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the results of emission testing conducted in accordance with the procedures as outlined in f)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)].

g) Miscellaneous Requirements

(1) None.