

TO: Interested Parties / Applicant

RE: Bemis Company, Inc. / 167-21605-00033

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

Via Certified Mail

January 5, 2006

Mr. Brian Wells
Bemis Company Inc.
1350 North Fruitridge Avenue
Terre Haute, IN 47805

Re: 167-21605-00033
Significant Source Modification to:
Part 70 permit No.: T167-6182-00033

Dear Mr. Wells:

Bemis Company Inc. was issued Part 70 operating permit T167-6182-00033 on June 28, 2004 for a stationary polyethylene film production, printing, and converting source. An application to modify the source was received on July 27, 2005. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (b) Flexographic printing press, identified as press #38, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11 and/or 12.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. **Effective Date of the Permit**
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (812) 462-3433 and ask for Mr. Rob Harmon or extension 14.

Sincerely,

George M. Needham
Director
Vigo County Air Pollution Control

Attachments

RKH

cc: File – Vigo County
Mindy Hahn – IDEM, OAQ, Permit Branch
Winter Bottum – IDEM, OAQ

Part 70 SIGNIFICANT SOURCE MODIFICATION

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - OFFICE OF AIR QUALITY and VIGO COUNTY AIR POLLUTION CONTROL

**Bemis Company, Inc.
1350 North Fruitridge Avenue
Terre Haute, Indiana 47804**

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: 167-21605-00033	
Issued by: George M. Needham Director Vigo County Air Pollution Control	Issuance Date: January 5, 2006

Section D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (34) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12;
- (35) Flexographic printing press, identified as Press #38, using Catalytic Oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (39) Catalytic Oxidizer, identified as I5, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 5.
- (40) Catalytic Oxidizer, identified as I6, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 6.
- (41) Catalytic Oxidizer, identified as I7, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 7.
- (42) Catalytic Oxidizer, identified as I8, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 8.
- (43) Catalytic Oxidizer, identified as I9, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 9.
- (44) Catalytic Oxidizer, identified as I10, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 10.
- (45) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 3.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (46) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 3.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitation and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 2-3]

- (a) The input of VOC to Press #37 and Press #38 combined shall be less than 800 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit, in combination with the rest of this condition, is required to limit the potential to emit of VOC to less than 40 tons per 12 consecutive month period.

- (b) Whenever Press #37 or Press #38 is applying VOC containing materials, each press exhaust must be vented through the operating oxidation control system. Each press shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%.
- (c) The capture efficiency system for Presses #37 and #38 shall be considered one-hundred (100) percent if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:
 - (1) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.
 - (2) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.
 - (3) The total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
 - (4) The average facial velocity (FV) of air through all NDO's shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDO's shall be into the enclosure.
 - (5) All access doors and windows whose areas are not included in (3) and are not included in the calculation in (4) shall be closed during routine operation of the process.
 - (6) All VOC in the enclosure emissions must be captured and contained for discharge through its respective control system.

Where:

Natural Draft Opening (NDO) - Any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed.

Permanent Total Enclosure (PTE) - A permanently installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured and contained for discharge through a control device.

Temporary Total Enclosure (TTE) - A temporarily installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured by the enclosure and contained for discharge through ducts that allow for the accurate measurement of VOC rates.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the capture system for the flexographic printers identified as Press #37 and Press #38 in conjunction with the catalytic oxidation systems shall be operated in such a manner to achieve a minimum of sixty percent (60%) overall control efficiency.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), when using solvent based inks at the flexographic printers identified as Press #37 and Press #38 the catalytic oxidation systems shall maintain a minimum of ninety percent (90%) destruction efficiency.

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty (60) days after achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify compliance with the overall VOC control efficiency (including capture and destruction efficiency) requirement in Condition D.6.1 for the Catalytic Oxidizers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 ½) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.6.5 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of each catalytic oxidizer in the control system used to control emissions from Press #37 and Press #38. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of any catalytic oxidizer in the control system used to control emissions from Press #37 and Press #38 is below the values in the table below. A three (3) hour average temperature that is below the respective value is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

Catalytic Oxidizer ID	Minimum 3-hour Average Temperature (°F)
Unit 5, Unit 6, Unit 9, Unit 10	550
Unit 7, Unit 8	650
Unit 11, Unit 12	500

- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.6.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.6.6 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following monitoring requirements:

- (a) Monitoring Approach For Permanent Total Enclosures Utilizing Pressure Differential.

	Indicator #1	Indicator #2	Indicator # 3
I. Indicator	Work Practice	Work Practice	Pressure differential
Measurement Approach	Inspect the operational condition of the control device bypass damper, the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.	Inspect operational condition of bypass damper position interlock.	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.
II. Indicator Range	An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised.	An excursion is identified as any finding that the bypass interlock is inoperative.	An excursion is defined as a pressure differential of less than negative (-)0.007" w.c. for 5 consecutive minutes while the process is operating; alternatively, a smaller differential (i.e., less than (-)0.007" w.c. can be used as the indicator if such differential is demonstrated as adequate to qualify the permanent total enclosure with Method 204 criteria. Alternatively, a three hour average value can be used as the indicator range.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Any excursion shall require that the process be immediately shut down and remain down until the problem can be corrected. Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria			
A. Data Representativeness	Properly positioned dampers, leak-free ductwork and a leak-free enclosure of the process will assure that all of the exhaust will reach the control device. Inspections will identify problems.	Properly operating interlocks will assure that the processes will be shut down if the bypass damper is open to atmosphere.	The monitor measures the pressure differential at the interface between the wall of the enclosure and surrounding atmospheres.
B. Verification of Operational Status	Inspection records.	Inspection records.	Not applicable.

	Indicator #1	Indicator #2	Indicator # 3
C. QA/QC Practices and Criteria	Not applicable.	Not applicable.	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.
D. Monitoring Frequency	Semiannually	Annually	Monitor continuously.
Data Collection Procedure	Record results of inspections and observations.	Record results of inspections and observations.	Record at least once every minute on a chart or electronic media.
Averaging Period	Not applicable.	Not applicable.	Not applicable if using any measured value as the indicator; Three hours if using 3-hour average as the indicator.
E. Recordkeeping	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of data and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Annually.	Semiannually.

(1) Rationale for Selection of Performance Indicators

Maintaining the enclosure under sufficient negative pressure at all times assures that the capture efficiency is maintained; therefore, monitoring the differential pressure across the enclosure provides an indicator of performance.

The operation of the bypass damper and integrity of the ductwork between the process and add-on control device are indicative that the process is exhausting all emissions to the control device. Bypass dampers on the system are electrically interlocked to assure the process exhaust stream is directed to the oxidation system during operation.

(2) Rationale for Selection of Indicator Ranges

The selected indicator range is a differential pressure of less than - 0.007 in. w.c. This indicator range is based upon Method 204 criteria. A differential pressure of - 0.007 in. w.c. is considered equivalent to a face velocity of 200 ft/minute for natural draft openings. Maintaining the enclosure under sufficient negative pressure at all times assures that the capture efficiency is maintained; therefore, monitoring the differential pressure across the enclosure provides an indicator of performance.

The operation of the bypass damper and integrity of the ductwork between the process and add-on control device are indicative that the process is exhausting all emissions to the control device. Bypass dampers on the system are electrically interlocked to assure the process exhaust stream is directed to the oxidation system during operation.

(b) Monitoring Approach For Catalytic Oxidizers

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
I. Indicator	Catalyst bed inlet temperature.	Work practice/inspection.	Performance test	Catalyst activity analysis.
Measurement Approach	Continuously monitor the operating temperature of the oxidizer catalyst bed.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction efficiency.	Determine the catalyst activity level by evaluating the conversion efficiency.
II. Indicator Range	An excursion is identified as a measurement of 50°F less than the average temperature demonstrated during the most recent compliance demonstration, or as any 3-hour period when the average temperature is less than the average temperature demonstrated during the most recent compliance demonstration.	An excursion is identified as any finding that the structural integrity of the oxidizer has been jeopardized and it no longer operates as designed.	An excursion is identified as any finding that the oxidizer does not meet the permitted destruction efficiency.	The catalyst conversion efficiency is evaluated and compared to typical values for fresh catalyst. An excursion is identified as a finding that the conversion efficiency is beyond the operational range of the catalyst as defined by the manufacturer.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an inspection, corrective action and a reporting requirement.
III. Performance Criteria				
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer chamber temperature shall be accurate to within 1.0% of temperature measured or $\pm 1^{\circ}\text{C}$, whichever is greater.	Inspections of the oxidizer system will identify problems.	A test protocol shall be prepared and approved by IDEM prior to conducting the performance test.	Analysis will determine the conversion efficiency of the catalyst.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20\text{F}$.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> • External inspection – annually • Internal inspection – annually. 	Once every five years.	Annually.
Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	Not applicable.	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of chart recorder paper or electronic media and corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and corrective actions taken in response to excursions.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain records of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of catalyst analyses and corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Submit test protocol and notification of testing to IDEM at least 35 days prior to test date. Submit test report 45 days after conducting a performance test.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.	For each performance test conducted.	Annually.

(1) Rationale for Selection of Performance Indicators

The oxidizer catalyst bed inlet temperature was selected because it is indicative of the effective operation of catalytic oxidizers. It has been demonstrated that the control efficiency achieved by a catalytic oxidizer is a function of the catalyst temperature and associated catalyst activity. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected.

Periodically sampling and testing the catalyst activity will assure that the catalyst will function properly when the minimum bed temperature is maintained. The catalyst conversion efficiency is evaluated and compared to typical values for fresh catalyst.

To further ensure consistent VOC oxidation, the structural integrity of the oxidizer must be checked periodically. This will indicate any problems with oxidizer integrity that could result in decreased oxidizer performance or efficiency.

An emissions performance test on the oxidizer is conducted once every five years to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) Rationale for Selection of Indicator Ranges

The selected indicator range for the catalyst inlet bed control temperature is established based upon demonstrated performance during a performance test.

The minimum required operating temperature of the catalyst bed is established at the operating temperature maintained during a performance test. Each oxidizer includes a temperature controller that maintains the desired catalyst bed temperature by using an auxiliary burner. The temperature controller is set to maintain a temperature at or above the established indicator range.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.7 Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.6.1.
- (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent, used for each press.
 - (A) Records shall include purchase orders, invoices, material safety data sheets (MSDS) or any other available records sufficient to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period (by press).
- (b) To document compliance with Conditions D.6.1, D.6.5 and D.6.6, the Permittee shall maintain records in accordance with (1) and (2) below.
- (1) The continuous temperature records (reduced to a three-hour average basis) for the Press #37 and Press #38 Catalytic Oxidizers and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (2) Daily records of the duct pressure, or fan amperage or differential pressure.
- (c) To document compliance with Condition D.6.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with the Part 70 Section C - General Record Keeping Requirements.

D.6.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL**

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Ave., Terre Haute, Indiana 47804
Mailing Address: 1350 North Fruitridge Ave., Terre Haute, Indiana 47804
Part 70 Permit No.: T167-6182-00033
Facility: Press #37 and Press #38
Parameter: VOC input
Limit: Combined VOC input less than 800 tons per 12 consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR: _____

Month	Press #37 and Press #38 Combined Input		
	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality
and Vigo County Air Pollution Control**

**Technical Support Document (TSD) for a Significant Source Modification and
Significant Permit Modification to a Part 70 Operating Permit**

Source Background and Description

Source Name:	Bemis Company, Inc.
Source Location:	1350 North Fruitridge Ave., Terre Haute, Indiana 47804
County:	Vigo
SIC Code:	2673 and 3081 (NAICS Codes 326111 and 322221)
Operation Permit No.:	T167-6182-00033
Operation Permit Issuance Date:	June 28, 2004
Significant Source Modification No.:	SSM 167-21605-00033
Significant Permit Modification No.:	SPM 167-21603-00033
Permit Reviewer:	Rob Harmon

The Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) have reviewed a modification application from Bemis Company relating to the construction and operation of the following flexographic presses:

- (a) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (b) Flexographic printing press, identified as press #38, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11 and/or 12.

History

On July 27, 2005, Bemis Company, Inc. submitted an application to the OAQ and VCAPC requesting to add two additional printing presses to their existing plant. Bemis Company, Inc. was issued a Part 70 Permit on June 28, 2004.

Existing Approvals

Bemis Company, Inc. was issued Part 70 permit T167-6182-00033 on June 28, 2004. The following approvals have been issued since that date:

1. First PSD/Significant Source Modification, 167-19667-00033, issued on May 2, 2005; and
2. First Significant Permit Modification, 167-19669-00033, issued on June 20, 2005.

Enforcement Issue

There are no enforcement actions pending relating to this modification.

Recommendation

The staff recommends to the Commissioner that the Significant Source or Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 27, 2005.

Emission Calculations

Potential to emit calculations for these flexographic printing Presses #37 and #38 were claimed confidential. Bemis Company, Inc. acknowledges that this modification would have been subject to 326 IAC 2-3 (Emission Offset) if they had not voluntarily taken limits on VOC input and on overall control efficiency. Bemis Company, Inc. acknowledges the VOC potential of the modification before control is greater than 100 tons per year so the modification is subject to the requirements of CAM. There are no HAP emissions associated with this source, so there are no HAP related applicability issues. Additionally, Bemis Company, Inc. acknowledges that the new printing presses are subject to the requirements of 326 IAC 8-5-5. By being subject to 326 IAC 8-5-5, they are not also subject to the general VOC reduction requirements of 326 IAC 8-1-6.

Justification for the Modification

The modification is subject to a Significant Source Modification under 326 IAC 2-7-10.5(f), as it involves construction of new emission units with potential to emit greater than 25 tons per year of VOC (prior to application of control efficiencies or limitations). Also, the modification is subject to a Significant Permit Modification under 326 IAC 2-7-12(d), as it involves significant changes to the monitoring, recordkeeping, and reporting permit terms or conditions relating to the new equipment.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	NA
PM-10	0.3
SO ₂	0.1
VOC	1350.7
CO	2.0
NO _x	10.0
HAPs	NA

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
PM	Less than 100
PM10	Less than 100
SO ₂	Less than 100
VOC	Greater than 250
CO	Less than 100
NO _x	Less than 100

- (a) This existing source is a major stationary source under Emission Offset (326 IAC 2-3) and Prevention of Significant Deterioration (PSD, 326 IAC 2-2) because VOC is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions are based upon Part 70 Permit T167-6182-00033, issued on June 28, 2004.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Limited Potential to Emit (tons/year)					
Process/Facility	PM	PM10	SO2	VOC	CO	NOx
Presses #37 & #38*	-	-	-	Less than 40	-	-
PSD/Emission Offset Significant Level	25	15	40	40	100	40
Significant ?	No	No	No	No	No	No

*Presses #37 and #38 are limited to less than 40 tons of VOC emissions per 12 consecutive month period.

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM	Attainment
PM-10	Attainment
PM-2.5	Attainment
SO ₂	Maintenance Attainment
NO ₂	Attainment
8-hour Ozone	Basic Nonattainment
1-hour ozone	Attainment
CO	Attainment
Lead	Not determined

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as nonattainment for the 8-hour ozone standards. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset.
- (b) Vigo County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.
- (c) Vigo County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Federal Rule Applicability

326 IAC 12, (40 CFR 60.430), Subpart QQ – Standards of Performance for the Graphic Arts Industry. This rule applies specifically to publication rotogravure printing. Presses #37 and #38 are not subject to this NSPS, because they are flexographic printing presses.

326 IAC 14, (40 CFR Part 63.820, Subpart KK – National Emission Standards for the Printing and Publishing Industry. This applies to publication rotogravure, product and packaging rotogravure, or wide-web flexographic

printing presses. Presses #37 and #38 are wide-web flexographic printing presses as defined under Subpart KK. However, because the source is not a source of HAPs, the source is only subject to minor recordkeeping and reporting requirements as necessary to demonstrate its area source status.

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

CAM is applicable to new or modified emission units that involve a pollutant specific emission unit and meet the following criteria:

- (1) The emission unit must be located at a major source for which a Part 70 permit is required.
- (2) Be subject to an emission limitation or standard.
- (3) Use a control device to achieve compliance.
- (4) Have potential precontrol emissions of at least 100 percent of the major source thresholds.

Presses #37 and #38 meet all the above criteria and therefore, are subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring. Bemis Company Inc. submitted a CAM plan for Presses #37 and #38 on November 8, 2005, the contents of which are directly incorporated into new Condition D.6.6 (see below).

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)

Press #37 and #38 are limited by this approval to less than 40 tons per year VOC emissions combined. This limit includes the requirement to attain a minimum of 95% overall VOC control, and limit VOC input to the two (2) presses combined to less than 800 tons of VOC per 12 consecutive month period. This limitation is below the significant level for modifications to existing major sources (40 tons per year). Therefore, this modification is not subject to the requirements of 326 IAC 2-3 (Emission Offset).

State Rule Applicability - Individual Facilities

326 IAC 8-5-5 (Graphic Arts Operations)

This rule applies to flexographic printing sources constructed after November 1, 1980, located anywhere in the state with potential emissions of twenty-five (25) tons or more of VOC per year.

Pursuant to 326 IAC 8-5-5(e)(3), flexographic printing operations are required to achieve a minimum of sixty percent (60%) overall control efficiency.

Pursuant to 326 IAC 8-5-5(c)(3)(B), when using solvent based inks shall have an incineration system of 90% destruction efficiency. Bemis Company, Inc. is in compliance with this rule, as Presses #37 and #38 catalytic oxidizers are designed to achieve above 90% destruction efficiency.

326 IAC 8-1-6 (General Reduction Requirements)

This rule does not apply to presses #37 and #38, as these presses are subject to 326 IAC 8-5-5.

Testing Requirements

Bemis Company Inc. operates 27 printing presses that utilize 12 catalytic oxidizers in order to achieve compliance. Each of these printing presses have potential VOC emissions in excess of 40 tons per year (before control) and therefore are subject to periodic testing under the current testing guidance. These units should be tested twice per permit term for VOC Capture and Destruction Efficiency (approximately every 2 ½ years).

Since Press #37 and Press #38 are new units, they each need to be tested for capture efficiency within sixty (60) days of achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial startup. Then they would fall into the same periodic testing schedule as the other existing flexographic printing presses. This modification does not include the addition of any new catalytic oxidizers, so the testing of those control devices would continue along the same schedule as contained in the Part 70 Permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ and VCAPC, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements. Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

1. The Printing Presses (#37 and #38) are effectively monitored through the applicable CAM Plan (40 CFR Part 64 above).
2. Pursuant to the CAM Plan, as required by 40 CFR 64, the catalytic oxidizers (Oxidizers I-5 through I-12) have applicable compliance monitoring conditions as specified below:
 - The inlet temperature to the catalyst bed shall be continuously monitored. If the temperature reading begins to drop below the minimum (which varies with the specific minimum temperatures being outlined in the respective D Section of the Permit), an automated control system shall adjust the operation accordingly. If the temperature can not be maintained, the printing presses relying on this oxidizer for control shall be shut down until the inlet temperature can be maintained or the VOC laden emissions stream can be sent to another catalytic oxidation unit.
 - Annually the catalyst shall be sampled and tested to ensure it is still active. If testing indicates the catalyst can no longer maintain the minimum 95% destruction efficiency at the current minimum temperature then it shall be replaced.

These monitoring conditions are necessary because the capture systems and the catalytic oxidation systems for the printing presses must operate properly to ensure compliance with 326 IAC 8-5-5 (Graphic Arts Operations) and in order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

The oxidation systems must be in operation at all times the printing presses are in operation.

Changes to the Part 70 Permit

The Part 70 Permit T167-6182-00033, issued on June 28, 2004 will be modified to incorporate the Significant Source Modification 167-21605-00033 (additions are **bolded** and deletions are ~~struck through~~ for emphasis)

Section A.2 will be modified to include the descriptions of the new emission units. The units previously identified as (34) through (64) are renumbered as (36) through (66) respectively. The new descriptions are as follows:

- (34) **Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.**
- (35) **Flexographic printing press, identified as press #38, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.**

The facility description section of Sections D.1, D.2, D.3, D.4, D.5, and D.6 have been updated to reflect the numbering changes caused by the above addition of new emission units for consistency purposes. Also, the catalytic oxidizers have had their descriptions updated to include these new presses among the units they control.

The following Section (D.6) which reflects the new emission units (Press #37 and #38) will be added in the Part 70 permit as follows (Existing Sections D.6 and D.7 will be renumbered as D.7 and D.8 respectively):

FACILITY OPERATION CONDITIONS

Section D.6

Facility Description [326 IAC 2-7-5(15)]

- (34) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12;
- (35) Flexographic printing press, identified as Press #38, using Catalytic Oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (39) Catalytic Oxidizer, identified as I5, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 5.
- (40) Catalytic Oxidizer, identified as I6, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 6.
- (41) Catalytic Oxidizer, identified as I7, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 7.
- (42) Catalytic Oxidizer, identified as I8, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 8.
- (43) Catalytic Oxidizer, identified as I9, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 9.
- (44) Catalytic Oxidizer, identified as I10, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 10.
- (45) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (46) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 2-3]

- (a) The input of VOC to Press #37 and Press #38 combined shall be less than 800 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit, in combination with the rest of this condition, is required to limit the potential to emit of VOC to less than 40 tons per 12 consecutive month period.**
- (b) Whenever Press #37 or Press #38 is applying VOC containing materials, each press exhaust must be vented through the operating oxidation control system. Each press shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%.**
- (c) The capture efficiency system for Presses #37 and #38 shall be considered one-hundred (100) percent if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:
 - (1) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.**
 - (2) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.**
 - (3) The total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.**
 - (4) The average facial velocity (FV) of air through all NDO's shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDO's shall be into the enclosure.**
 - (5) All access doors and windows whose areas are not included in (3) and are not included in the calculation in (4) shall be closed during routine operation of the process.**
 - (6) All VOC in the enclosure emissions must be captured and contained for discharge through its respective control system.****

Where:

Natural Draft Opening (NDO) - Any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed.

Permanent Total Enclosure (PTE) - A permanently installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured and contained for discharge through a control device.

Temporary Total Enclosure (TTE) - A temporarily installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured by the enclosure and contained for discharge through ducts that allow for the accurate measurement of VOC rates.

Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the capture system for the flexographic printers identified as Press #37 and Press #38 in conjunction with the catalytic oxidation systems shall be operated in such a manner to achieve a minimum of sixty percent (60%) overall control efficiency.**
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), when using solvent based inks at the flexographic printers identified as Press #37 and Press #38 the catalytic oxidation systems shall**

maintain a minimum of ninety percent (90%) destruction efficiency.

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty (60) days after achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify compliance with the overall VOC control efficiency (including capture and destruction efficiency) requirement in Condition D.6.1 for the Catalytic Oxidizers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 ½) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.6.5 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of each catalytic oxidizer in the control system used to control emissions from Press #37 and Press #38. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports whenever the three (3) hour average temperature of any catalytic oxidizer in the control system used to control emissions from Press #37 and Press #38 is below the values in the table below. A three (3) hour average temperature that is below the respective value is not a deviation from this permit. Failure to take response steps in accordance with Part 70 Section C – Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

Catalytic Oxidizer ID	Minimum 3-hour Average Temperature (°F)
Unit 5, Unit 6, Unit 9, Unit 10	550
Unit 7, Unit 8	650
Unit 11, Unit 12	500

- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.6.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.6.6 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following monitoring requirements:

(a) Monitoring Approach For Permanent Total Enclosures Utilizing Pressure Differential.

	Indicator #1	Indicator #2	Indicator # 3
I. Indicator	Work Practice	Work Practice	Pressure differential
Measurement Approach	Inspect the operational condition of the control device bypass damper, the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.	Inspect operational condition of bypass damper position interlock.	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.
II. Indicator Range	An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised.	An excursion is identified as any finding that the bypass interlock is inoperative.	An excursion is defined as a pressure differential of less than negative (-)0.007" w.c. for 5 consecutive minutes while the process is operating; alternatively, a smaller differential (i.e., less than (-)0.007" w.c. can be used as the indicator if such differential is demonstrated as adequate to qualify the permanent total enclosure with Method 204 criteria. Alternatively, a three hour average value can be used as the indicator range.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Any excursion shall require that the process be immediately shut down and remain down until the problem can be corrected. Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria			
A. Data Representativeness	Properly positioned dampers, leak-free ductwork and a leak-free enclosure of the process will assure that all of the exhaust will reach the control device. Inspections will identify problems.	Properly operating interlocks will assure that the processes will be shut down if the bypass damper is open to atmosphere.	The monitor measures the pressure differential at the interface between the wall of the enclosure and surrounding atmospheres.
B. Verification of Operational Status	Inspection records.	Inspection records.	Not applicable.

	Indicator #1	Indicator #2	Indicator # 3
C. QA/QC Practices and Criteria	Not applicable.	Not applicable.	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.
D. Monitoring Frequency	Semiannually	Annually	Monitor continuously.
Data Collection Procedure	Record results of inspections and observations.	Record results of inspections and observations.	Record at least once every minute on a chart or electronic media.
Averaging Period	Not applicable.	Not applicable.	Not applicable if using any measured value as the indicator; Three hours if using 3-hour average as the indicator.
E. Recordkeeping	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of data and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Annually.	Semiannually.

(1) Rationale for Selection of Performance Indicators

Maintaining the enclosure under sufficient negative pressure at all times assures that the capture efficiency is maintained; therefore, monitoring the differential pressure across the enclosure provides an indicator of performance.

The operation of the bypass damper and integrity of the ductwork between the process and add-on control device are indicative that the process is exhausting all emissions to the control device. Bypass dampers on the system are electrically interlocked to assure the process exhaust stream is directed to the oxidation system during operation.

(2) Rationale for Selection of Indicator Ranges

The selected indicator range is a differential pressure of less than - 0.007 in. w.c. This indicator range is based upon Method 204 criteria. A differential pressure of - 0.007 in. w.c. is considered equivalent to a face velocity of 200 ft/minute for natural draft openings. Maintaining the enclosure under sufficient negative pressure at all times assures that the capture efficiency is maintained; therefore, monitoring the differential pressure across the enclosure provides an indicator of performance.

The operation of the bypass damper and integrity of the ductwork between the process and add-on control device are indicative that the process is exhausting all emissions to the control device. Bypass dampers on the system are electrically interlocked to assure the process exhaust stream is directed to the oxidation system during operation.

(b) Monitoring Approach For Catalytic Oxidizers

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
I. Indicator	Catalyst bed inlet temperature.	Work practice/inspection.	Performance test	Catalyst activity analysis.
Measurement Approach	Continuously monitor the operating temperature of the oxidizer catalyst bed.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction efficiency.	Determine the catalyst activity level by evaluating the conversion efficiency.
II. Indicator Range	An excursion is identified as a measurement of 50°F less than the average temperature demonstrated during the most recent compliance demonstration, or as any 3-hour period when the average temperature is less than the average temperature demonstrated during the most recent compliance demonstration.	An excursion is identified as any finding that the structural integrity of the oxidizer has been jeopardized and it no longer operates as designed.	An excursion is identified as any finding that the oxidizer does not meet the permitted destruction efficiency.	The catalyst conversion efficiency is evaluated and compared to typical values for fresh catalyst. An excursion is identified as a finding that the conversion efficiency is beyond the operational range of the catalyst as defined by the manufacturer.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an inspection, corrective action and a reporting requirement.
III. Performance Criteria				
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer chamber temperature shall be accurate to within 1.0% of temperature measured or $\pm 1^{\circ}\text{C}$, whichever is greater.	Inspections of the oxidizer system will identify problems.	A test protocol shall be prepared and approved by IDEM prior to conducting the performance test.	Analysis will determine the conversion efficiency of the catalyst.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20\text{F}$.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> • External inspection – annually • Internal inspection – annually. 	Once every five years.	Annually.
Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	Not applicable.	Not applicable.	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of chart recorder paper or electronic media and corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and corrective actions taken in response to excursions.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain records of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of catalyst analyses and corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Submit test protocol and notification of testing to IDEM at least 35 days prior to test date. Submit test report 45 days after conducting a performance test.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	Semiannually.	For each performance test conducted.	Annually.

(1) Rationale for Selection of Performance Indicators

The oxidizer catalyst bed inlet temperature was selected because it is indicative of the effective operation of catalytic oxidizers. It has been demonstrated that the control efficiency achieved by a catalytic oxidizer is a function of the catalyst temperature and associated catalyst activity. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected.

Periodically sampling and testing the catalyst activity will assure that the catalyst will function properly when the minimum bed temperature is maintained. The catalyst conversion efficiency is evaluated and compared to typical values for fresh catalyst.

To further ensure consistent VOC oxidation, the structural integrity of the oxidizer must be checked periodically. This will indicate any problems with oxidizer integrity that could result in decreased oxidizer performance or efficiency.

An emissions performance test on the oxidizer is conducted once every five years to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) Rationale for Selection of Indicator Ranges

The selected indicator range for the catalyst inlet bed control temperature is established based upon demonstrated performance during a performance test.

The minimum required operating temperature of the catalyst bed is established at the operating temperature maintained during a performance test. Each oxidizer includes a temperature controller that maintains the desired catalyst bed temperature by using an auxiliary burner. The temperature controller is set to maintain a temperature at or above the established indicator range.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.7 Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.6.1.
- (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent, used for each press.
 - (A) Records shall include purchase orders, invoices, material safety data sheets (MSDS) or any other available records sufficient to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period (by press).
- (b) To document compliance with Conditions D.6.1, D.6.5 and D.6.6, the Permittee shall maintain records in accordance with (1) and (2) below.
- (1) The continuous temperature records (reduced to a three-hour average basis) for the Press #37 and Press #38 Catalytic Oxidizers and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (2) Daily records of the duct pressure, or fan amperage or differential pressure.
- (c) To document compliance with Condition D.6.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with the Part 70 Section C - General Record Keeping Requirements.

D.6.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

The Report Form referenced in the new Condition D.6.9 has been added following the existing Report Forms.

The Table of Contents has been updated to reflect all appropriate changes.

In addition to all the above changes relating to the construction and operation of the two (2) new presses, there were errors found in previous approvals which had to be addressed. The first relates to the maximum heat input capacity of Oxidizers I11 and I12. Those descriptions have been changed as follows:

- (45) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of ~~4.5~~ 3.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (46) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of ~~4.5~~ 3.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19

through #25 and #27 through #38, and exhausting to stack 12.

The second change relates to the operational temperature of Oxidizers I9 and I10. They were incorrectly listed as having a minimum temperature of 500 °F in prior approvals, but should have been 550 °F. Condition D.3.7 has been modified as follows:

D.3.7 Catalytic Oxidizer Requirements

- (a) The Permittee shall monitor ~~Unit 5 and Unit 6~~ **Unit 5, Unit 6, Unit 9 and Unit 10** according to the following:
- (1) A continuous monitoring system shall be calibrated, maintained, and operated on each catalytic oxidizer (Unit 5, ~~and Unit 6,~~ **Unit 9 and Unit 10**) for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of any catalytic oxidizer is below 550°F. A three (3) hour average temperature that is below 550°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
 - (2) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.2. and D.3.3, as approved by IDEM and VCAPC.
 - (3) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of and catalytic oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
- (b) The Permittee shall monitor Unit 7 and Unit 8 according to the following:
- (1) A continuous monitoring system shall be calibrated, maintained, and operated on each catalytic oxidizer (Unit 7 and Unit 8) for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of any catalytic oxidizer is below 650°F. A three (3) hour average temperature that is below 650°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
 - (2) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.2. and D.3.3, as approved by IDEM and VCAPC.
 - (3) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of and catalytic oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the

compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

- (c) The Permittee shall monitor ~~Unit 9, Unit 10,~~ Unit 11 and Unit 12 according to the following:
- (1) A continuous monitoring system shall be calibrated, maintained, and operated on each catalytic oxidizer (~~Unit 9, Unit 10,~~ Unit 11 and Unit 12) for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of any catalytic oxidizer is below 500°F. A three (3) hour average temperature that is below 500°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
 - (2) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.2 and D.3.3, as approved by IDEM and VCAPC.
 - (3) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of and catalytic oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

IDEM's mailing address has changed. This change has been incorporated throughout the Part 70 Permit as necessary:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue, P.O. Box 6045
Indianapolis, Indiana ~~46206-6045~~ **46204-2251**

The language in Condition B.25 was changed in order to reflect the current rule language:

~~B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.~~

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the

condition of this permit if the appropriate performance or compliance test or procedure had been performed.

Conclusion

The operation of Presses #37 and #38 shall be subject to the conditions of the attached **Significant Source Modification 167-21605-00033 and Significant Permit Modification 167-21603-00033.**