



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant  
DATE: April 30, 2007  
RE: Bemis Company, Inc. / 167-23761-00033  
FROM: Nisha Sizemore  
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  
FNPER.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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Indianapolis, IN 46204-2251  
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Dan R. Rose  
Bemis Company, Inc.  
P.O. Box 905  
Terre Haute, IN 47808-0905

April 30, 2007

Re: 167-23761-00033  
Significant Source Modification to  
Part 70 Operating Permit 167-6182-00033

Dear Mr. Rose,

Bemis Company, Inc. was issued a Part 70 operating permit on June 28, 2004 for a polyethylene packaging manufacturing plant located at 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218. An application to modify the emission source was received on October 16, 2006. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (1) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (2) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

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).
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 2-2-8(a)(1), this approval shall become invalid if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of eighteen (18) months 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 Significant Permit Modification 167-23850-00033 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 (800) 451-6027, press 0 and ask for Allen R. Davidson or extension 3-5693, or dial (317) 233-5693.

Sincerely,

  
Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

Attachments  
ARD

cc: File - Vigo County  
Vigo County Health Department  
Vigo County Air Pollution Control  
Air Compliance Section Inspector - Cynthia Luxford  
Compliance Data Section  
Administrative and Development



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PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT  
and  
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, IN 47804-4218

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

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.

4th Significant Source Modification 167-23761-00033	
Issued by: <i>Nisha Sizemore</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: <b>April 30, 2007</b>

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary polyethylene film plant including film production, printing, and converting operations.

Source Address: 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218  
Mailing Address: P.O. Box 905, Terre Haute, IN 47808-0905  
General Source Phone Number: (812) 466-2213  
SIC Code: 2673, 3081, and 3079  
County Location: Vigo County  
Source Location Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (1) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.
- (2) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.
- (3) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.
- (4) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.
- (5) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.
- (6) Flexographic printing press, identified as press #11, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (7) Flexographic printing press, identified as press #12, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (8) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (9) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (10) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.



- (11) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (12) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (13) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (14) Flexographic printing press, identified as press #19, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (15) Flexographic printing press, identified as press #20, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (16) Flexographic printing press, identified as press #21, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (17) Flexographic printing press, identified as press #22, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (18) Flexographic printing press, identified as press #23, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (19) Flexographic printing press, identified as press #24, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (20) Flexographic printing press, identified as press #25, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (21) Flexographic printing press, identified as press #27, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (22) Flexographic printing press, identified as press #28, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (23) Flexographic printing press, identified as press #29, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (24) Flexographic printing press, identified as press #30, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (25) Flexographic printing press, identified as press #31, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (26) Flexographic printing press, identified as press #32, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (27) Flexographic printing press, identified as press #33, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28) Flexographic printing press, identified as press #34, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (29) Flexographic printing press, identified as press #35, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (30) Flexographic printing press, identified as press #36, using oxidation as control, and

exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

- (31) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (32) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (33) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (34) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (35) Closed solvent spray type parts washer exhausting to stack 20.
- (36) Cyrel plate making facility exhausting to stack 23.
- (37) Four (4) Catalytic Oxidizers identified as I1, I2, I3 and I4 and exhausting respectively through Stacks S1, S2, S3 and S4, each with a maximum heat input capacity of 3.0 million BTU per hour for the supplemental fuel, interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 and/or #18.

(Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)

- (38) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 5.
- (39) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- (40) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- (41) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- (42) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- (43) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.

- (44) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.
- (45) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.
- (46) Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.
- (47) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack 241.
- (48) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- (49) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- (50) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.
- (51) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.
- (52) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.
- (53) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.
- (54) Storage tank for hazardous waste storage of ink, identified as T8, capacity of 6,000 gallons, exhausting to stack 248.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6-1-2]
- (2) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (3) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2]
- (4) "Oxydry" Anti-offset powder (cornstarch) applied to printed film, insignificant PM source. [326 IAC 6-1-2]

- (5) Polyethylene extrusion process, resins and manufacturing film using the blown film process, insignificant PM and VOC source. [326 IAC 6-1-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

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- (a) This permit, T167-6182-00033, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, and VCAPC upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### B.4 Enforceability [326 IAC 2-7-7]

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- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, Vigo County Air Pollution Control (VCAPC), the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Vigo County Air Pollution Control.

### B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.6 Severability [326 IAC 2-7-5(5)]

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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This permit does not convey any property rights of any sort or any exclusive privilege.

B.8 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ and VCAPC, within a reasonable time, any information that IDEM, OAQ and VCAPC, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and VCAPC, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ and VCAPC, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year, with submittal of the certification due by July 1 of the following year. Certifications for all subsequent years shall cover the time period from January 1 to December 31, with submittal of the certification due by July 1 of the following year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control  
103 South 3rd Street  
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and VCAPC, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1), (3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

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- (a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and VCAPC, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and VCAPC. IDEM, OAQ and VCAPC, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Emergency Provisions [326 IAC 2-7-16]**

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

**IDEM**

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6865

**VCAPC**

Telephone Number: 812-462-3433  
Facsimile Number: 812-462-3447

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:



- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ and VCAPC, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and VCAPC, telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ or VCAPC, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ or VCAPC, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ or VCAPC, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T167-6182-00033 issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and Part 70 operating permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ and VCAPC, determine any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ and VCAPC, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or VCAPC, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or VCAPC, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and VCAPC, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ and VCAPC, take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and VCAPC, any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and VCAPC, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, VCAPC, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5][IC 13-17-3-2]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, VCAPC, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ and VCAPC, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ or VCAPC, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

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.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

#### C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.



- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

#### **Testing Requirements [326 IAC 2-7-6(1)]**

##### **C.6 Performance Testing [326 IAC 3-6]**

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ and VCAPC.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ and VCAPC of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC, if the Permittee submits to IDEM, OAQ and VCAPC, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.7 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.10 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ and VCAPC, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ and VCAPC, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.11 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

**C.12 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records;
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and VCAPC may extend the retesting deadline.
- (c) IDEM, OAQ and VCAPC reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.14 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

and

Vigo County Air Pollution Control  
103 South Third Street  
Terre Haute, Indiana 47807

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Vigo County Air Pollution Control on or before the date it is due.

**C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6][326 IAC 2-2][326 IAC 2-3]**

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a "project" (as defined in 326 IAC 2-2-1(qq)) and/or 326 IAC 2-3-1(II)) at an existing emissions unit or at a source with Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
  - (A) A description of the project.
  - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    - (i) Baseline actual emissions;
    - (ii) Projected actual emissions;
    - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3); and
    - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
  - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq) for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
  - (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

## Stratospheric Ozone Protection

### C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 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 pursuant to 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.



## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (1) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.
- (2) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.
- (3) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.
- (4) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.
- (5) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.
- (36) Cyrel plate making facility exhausting to stack 23.
- (47) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack 241.
- (48) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- (49) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- (50) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.
- (51) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.
- (52) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.
- (53) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.
- (54) Storage tank for hazardous waste storage of ink, identified as T8, capacity of 6,000 gallons, exhausting to stack 248.

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

There are no specific applicable requirements for these emission units.

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

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

- (14) Flexographic printing press, identified as press #19, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (15) Flexographic printing press, identified as press #20, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (16) Flexographic printing press, identified as press #21, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (17) Flexographic printing press, identified as press #22, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (18) Flexographic printing press, identified as press #23, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (19) Flexographic printing press, identified as press #24, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (20) Flexographic printing press, identified as press #25, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (21) Flexographic printing press, identified as press #27, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (22) Flexographic printing press, identified as press #28, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (23) Flexographic printing press, identified as press #29, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (24) Flexographic printing press, identified as press #30, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (25) Flexographic printing press, identified as press #31, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (26) Flexographic printing press, identified as press #32, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (27) Flexographic printing press, identified as press #33, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28) Flexographic printing press, identified as press #34, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (29) Flexographic printing press, identified as press #35, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (31) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (32) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

- (33) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (34) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (38) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 5.
- (39) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- (40) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- (41) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- (42) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- (43) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.
- (44) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.
- (45) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.
- (46) Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.

(Note: Each individual oxidizer I5, I6, I7, I8, I9, I10, I11 and I12 is only capable of handling air flow from two of the presses at a time, and the RTO, I13, is capable of handling air flow from eight to twelve of the presses at a time.)

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

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

### D.2.1 Prevention of Significant Deterioration - Best Available Control Technology (BACT) [326 IAC 2-2] Pursuant to 326 IAC 2-2, the PSD BACT for Bemis Company shall be the following:

- (a) Whenever any of presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 or #40 is applying VOC containing materials, the exhaust from that press shall 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%.
- (b) The capture system for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40 shall be considered to achieve one-hundred percent (100%) capture efficiency 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 condition shall satisfy the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

**D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]**

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- (a) Pursuant to 326 IAC 8-5-5(e)(3), the VOC capture systems on presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40, in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner as to attain and maintain a minimum 60% overall control efficiency for flexographic printing.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

**Compliance Determination Requirements**

**D.2.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]**

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- (a) Testing requirements for the destruction efficiency of the thermal and catalytic oxidizers are as follows:
  - (1) Within sixty (60) days after the start up of the new regenerative thermal oxidizer (I13), the Permittee shall conduct a performance test to verify its VOC destruction efficiency as per Conditions D.2.1 and D.2.2 utilizing methods as approved by the Commissioner.
  - (2) Testing of the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) to verify their destruction efficiencies was performed on April 17, 2006.
  - (3) The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.
- (b) Testing requirements for the capture efficiency of the flexographic presses are as follows:
  - (1) Within sixty (60) days after the issuance of permit SPM 167-21257-00033, the Permittee shall conduct a performance test to verify the capture efficiencies of presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 as per Conditions D.2.1 and D.2.2 utilizing methods as approved by the Commissioner.
  - (2) Testing of the capture efficiency was performed on presses #37 and #38 on April 17, 2006.
  - (3) Within sixty (60) days after achieving the maximum rated capacity at which press #39 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the capture efficiency utilizing methods as approved by the Commissioner.
  - (4) Within sixty (60) days after achieving the maximum rated capacity at which press #40 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the capture efficiency utilizing methods as approved by the Commissioner.
  - (5) The capture efficiency test shall be repeated for a press in this section whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of the presses, which include any of the following:
    - (A) The addition of a print station to a press,

- (B) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers), or
  - (C) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

**D.2.4 Oxidizer Temperature [326 IAC 2-2]**

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of each oxidizer in the control system used to control emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40. For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizer (I13) is the combustion zone 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C -Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system used to control emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40 is below the corresponding temperature in the table below. A three (3) hour average operating temperature that is below the corresponding temperature in the table below is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-Hour Average Temperature (°F)
I5, I6, I7, I9, I10, I11	550
I8, I12	600
I13	1600

- (b) The Permittee shall determine the three (3) hour average operating temperature of each oxidizer in the control system from the most recent valid performance test that demonstrates compliance with the limits in Condition D.2.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average operating temperature of any oxidizer in the control system is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

**D.2.5 Oxidizer Grouping**

- (a) Catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, I12 and regenerative thermal oxidizer I13 have been interconnected with a common press exhaust plenum to form an oxidization control system. As a control system, the captured VOC emissions from any operating press (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40) are exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).

- (1) Presses #19, #20, #21, #22, #23, #24 and #25 are each rated at 4250 cfm.
  - (2) Presses #27, #28, #29, #30, #31, #32, #33, #34 and #35 are each rated at 6375 cfm.
  - (3) Press #36 is rated at 4000 cfm.
  - (4) Presses #37 and #38 are each rated at 7000 cfm.
  - (5) Presses #39 and #40 are each rated at 10000 cfm.
  - (6) Oxidizers I5, I6, I7 and I8 are each rated at 8500 cfm,
  - (7) Oxidizers I9, I10, I11 and I12 are each rated at 12750 cfm.
  - (8) Oxidizer I13 is rated at 55000 cfm.
- (b) To prevent an uncontrolled release of captured VOC emissions:
- (1) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.
  - (2) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.
  - (3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidation control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidation control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.
  - (4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.
  - (5) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).

**D.2.6 Parametric Monitoring [326 IAC 2-2]**

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- (a) The Permittee shall establish the appropriate monitoring parameter for each press (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM) from the most recent performance test that demonstrates compliance with the VOC limits in Condition D.2.1 and D.2.2.
- (b) The Permittee shall maintain one of the following permanent total enclosure monitoring parameter values for each press for each day the press is operating as an indication that 100 percent capture is being attained:

- (1) Duct pressure or fan amperage - The Permittee shall maintain the flow indicator parameter at a value at least 85 percent of the value as established during the most recent performance test, or
  - (2) Differential pressure - The Permittee shall maintain a differential pressure at a value of - 0.007 inches of water column or less, or
  - (3) Differential pressure - The Permittee shall maintain a differential pressure at or less than a value demonstrated during the most recent performance test as being sufficient to meet the 200 feet/min face velocity at all NDOs.
- (c) The established permanent total enclosure monitoring parameter value shall be observed at least once per day for each day the press is operating.

**D.2.7 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following compliance assurance monitoring requirements for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40:

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

	Indicator #1	Indicator #2	Indicator # 3
<b>I. Indicator</b>	<b>Work Practice</b>	<b>Work Practice</b>	<b>Pressure differential</b>
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.
<b>II. Indicator Range</b>	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 -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 satisfy the permanent total enclosure with Method 204 criteria.  Alternatively, a three hour average value can be used as the indicator range.
<b>Corrective Action</b>	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.
<b>III. Performance Criteria</b>			
<b>A. Data Representativeness</b>	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.



	Indicator #1	Indicator #2	Indicator #3
B. Verification of Operational Status	Inspection records.	Inspection records.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated.
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	Quarterly	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, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, 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	Quarterly	Annually.	Quarterly

(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 ±1°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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria ± 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> <li>• External inspection - annually</li> <li>• Internal inspection - annually.</li> </ul>	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.
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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 dates of catalyst sampling, initials of person conducting sampling, catalyst analysis 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	Quarterly	Annually.	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 of 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.

(c) Monitoring Approach For The Regenerative Thermal Oxidizer:

	Indicator #1	Indicator #2	Indicator #3
i. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction efficiency.

	Indicator #1	Indicator #2	Indicator #3
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.
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.
III. Performance Criteria			
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone 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 the IDEM prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^{\circ}\text{F}$ .	Not applicable.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously	External inspection - annually Internal inspection - annually.	Once every five years.
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.
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	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, including dates and initials of person conducting inspection, and of 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.
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.
Frequency	Quarterly.	Annually.	For each performance test conducted.

(1) Rationale for Selection of Performance Indicators

The oxidizer combustion zone temperature was selected because it is indicative of a regenerative thermal oxidizer's operation. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected. If the combustion zone temperature decreases significantly, complete combustion may not occur.

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 during the permit term to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) Rationale for Selection of Indicator Ranges

The selected indicator range for the oxidizer combustion zone temperature is established based upon demonstrated performance during a performance test.

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

**D.2.8 Monitoring [326 IAC 2-2]**

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- (a) The Permittee shall conduct quarterly inspections of all components relating to the capture system of each of presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #37, #38, #39 and #40. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, and I12) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permitted shall take reasonable response steps in accordance with Section C - Response to Excursions or Accidences. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

**D.2.9 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.4, and D.2.6, the Permittee shall maintain records in accordance with (1) and (2) below:
- (1) Continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, I12, and the combustion zone temperature for the regenerative thermal oxidizer I13 (reduced to a three-hour average basis) and the three (3) hour average inlet temperature to the catalyst bed and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant performance test.
- (2) Daily records of the permanent total enclosure monitoring parameter value (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM, OAQ and VCAPC).
- (b) To document compliance with Condition D.2.8 the Permittee shall maintain records of inspections or sample. These records shall include as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions taken (if any are required).

- (c) All records shall be maintained in accordance with the Part 70 Section C - General Record Keeping Requirements.

**SECTION D.3**

**FACILITY OPERATION CONDITIONS**

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

- (30) Flexographic printing press, identified as press #36, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (38) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 5.
- (39) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- (40) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- (41) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- (42) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- (43) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.
- (44) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.
- (45) 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, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.
- (46) Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.

(Note: Each individual oxidizer I5, I6, I7, I8, I9, I10, I11 and I12 is only capable of handling air flow from two of the presses at a time, and the RTO, I13, is capable of handling air flow from eight to twelve of the presses at a time.)

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

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

### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]

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Pursuant to SSM 167-18122-00033, issued on May 3, 2004, and revised through this Part 70 permit, the following conditions apply:

- (a) The annual VOC usage on press #36 shall be limited such that the potential to emit does not exceed 39.99 tons, considering the most recent determination of capture and destruction. Compliance with this limit shall be determined at the end of each month based on the previous 12 months. Compliance shall be documented using the following equation: (Printing VOC usage) \* (1 - overall control efficiency) + Cleanup VOC loss # 39.99 tons. Compliance with this condition shall make this press not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration (PSD).
- (b) Whenever press #36 is applying VOC containing materials, the press exhaust shall be vented through the operating oxidation control system. The press shall maintain a minimum overall control efficiency of 80.75% for VOC emissions.
- (c) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

### D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

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- (a) Pursuant to 326 IAC 8-5-5(e)(3), the VOC capture system on press #36, in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner to attain and maintain a minimum 60% overall control efficiency for flexographic printing.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

## Compliance Determination Requirements

### D.3.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

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- (a) Testing requirements for the destruction efficiency of the thermal and catalytic oxidizers are listed in Condition D.2.3 of this permit.
- (b) The capture efficiency test performed on October 27, 2004 for press #36, shall be repeated whenever a reconfiguration or change in its design is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this press, which include any of the following:
  - (1) The addition of a print station to the press,
  - (2) Increasing or decreasing the volumetric flow rate from the dryer (e.g. by changing the size of press fans/motors or removal or derating of dryers), or
  - (3) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

### D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

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- (a) Compliance with the VOC limitations contained in Conditions D.3.1 shall be determined by tracking all VOC usage (including but not limited to inks, solvents, additives, and clean-up solvents) by press #36. This data shall be compiled monthly and added to the previous 11 months to generate a 12-consecutive month total VOC fed to press #36.



- (b) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the oxidizer system (I5, I6, I7, I8, I9, I10, I11, I12 and I13) to achieve compliance with conditions D.3.1 and D.3.2.

**D.3.5 Oxidizer Temperature**

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating temperature of each oxidizer in the control system used to control emissions from press #36. For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizer (I13) is the combustion zone 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C -Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system used to control emissions from press #36 is below the corresponding temperature in the table below. A three (3) hour average operating temperature that is below the corresponding temperature in the table below is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-Hour Average Temperature (°F)
I5, I6, I7, I9, I10, I11	550
I8, I12	600
I13	1600

- (b) The Permittee shall determine the three (3) hour average operating temperature of each oxidizer in the control system from the most recent valid performance test that demonstrates compliance with the VOC limit in Condition D.3.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average operating temperature of any oxidizer in the control system is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

**D.3.6 Oxidizer Grouping**

- (a) Catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, I12 and regenerative thermal oxidizer I13 have been interconnected with a common press exhaust plenum to form an oxidization control system. As a control system, the captured VOC emissions from any operating press (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40) are exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).
  - (1) Presses #19, #20, #21, #22, #23, #24 and #25 are each rated at 4250 cfm.
  - (2) Presses #27, #28, #29, #30, #31, #32, #33, #34 and #35 are each rated at 6375 cfm.
  - (3) Press #36 is rated at 4000 cfm.
  - (4) Presses #37 and #38 are each rated at 7000 cfm.

- (5) Presses #39 and #40 are each rated at 10000 cfm.
  - (6) Oxidizers I5, I6, I7 and I8 are each rated at 8500 cfm,
  - (7) Oxidizers I9, I10, I11 and I12 are each rated at 12750 cfm.
  - (8) Oxidizer I13 is rated at 55000 cfm.
- (b) To prevent an uncontrolled release of captured VOC emissions:
- (1) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.
  - (2) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.
  - (3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidation control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidation control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.
  - (4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.
  - (5) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).

#### D.3.7 Parametric Monitoring

- (a) The Permittee shall establish the appropriate monitoring parameter for press #36 (duct pressure, or fan amperage, or other parameter as approved by IDEM, OAQ and VCAPC) from the most recent performance test that demonstrates compliance with the limits in Conditions D.3.1 and D.3.2.
- (b) The Permittee shall maintain one of the following monitoring parameter values for each press for each day the press is operating as an indication that capture is being attained:
  - (1) Duct pressure or fan amperage - The Permittee shall maintain the flow indicator parameter at a value at least 85 percent of the value as established during the most recent performance test.
- (c) The established monitoring parameter value shall be observed at least once per day for each day the press is operating.

#### D.3.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following compliance assurance monitoring requirements for press #36:

(a) Monitoring Approach For Unenclosed Presses

	Indicator # 1	Indicator #2	Indicator #3 <sup>a</sup>
I. Indicator	Work Practice	Work Practice	Work Practice
Measurement Approach	Inspect the integrity of the exhaust system from the process to the control device.	Inspect operational condition of all interlocks, including: <ul style="list-style-type: none"> <li>• between color dryer flow;</li> <li style="padding-left: 20px;">and</li> <li>• tunnel oven flow.</li> </ul>	Use a smoke stick or equivalent approach to assure that the dryer is negative to the surrounding atmosphere.
II. Indicator Range	An excursion is defined as any finding that the integrity of the exhaust system has been compromised.	Establish the proper interlock sensor location at the time of installation. Document proper operation during the capture efficiency test. An excursion is defined as any finding that any interlocks are inoperative.	Case-by-case determination of appropriate compliance demonstration technique. An excursion is defined as any operation of the press without proper placement of dryer cans being demonstrated.
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.	Press shall not be operated until proper placement of dryer cans is demonstrated. Each excursion triggers an assessment of the problem, and corrective action.
III. Performance Criteria			
A. Data Representativeness	Properly positioned dampers and leak free ductwork will assure that all of the normally captured exhaust will reach the control device. Inspections will identify problems.	Properly operating interlocks will assure that dampers are correctly positioned. Inspections will identify problems.	Monitoring approach will assure the dryer is set to properly contain supply air.
B. Verification of Operational Status	Inspection records.	Inspection records.	Not applicable
C. QA/QC Practices and Criteria		Validate functionality of between color dryer and tunnel oven exhaust flow sensors by proving proper operation, annually.	
D. Monitoring Frequency	Quarterly	Annually.	Whenever the location of the dryer is disrupted. (This may not be necessary for two piece dryers.)
Data Collection Procedure	Record results of inspections and observations.	Record results of inspections and observations	Not applicable
Averaging Period	Not applicable.	Not applicable.	Not applicable.

E. Recordkeeping	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, 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.
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	Quarterly	Annually.	Quarterly

<sup>a</sup> Indicator #3 is only necessary for unenclosed presses with variable placement settings for the between color dryer cans.

(1) Rationale for Selection of Performance Indicators

Press dryers are designed to operate under negative pressure and comprise the capture system of the Process line. The dryer system and the airflow through the system is an integral part of the process designed by the manufacturer. A properly balanced air system must be maintained in order to assure proper drying of the inks and coatings and product quality. Furthermore, a properly balanced air system must be maintained in order to assure that the exhaust gas is maintained well below the LEL. In order to meet fire insurance requirements, most exhaust ducts typically are fitted with LEL sensors (required if LEL goes above 25 percent) and alarms and with flow sensors that will trigger a shutdown if the sensor activates due to a flow fault, typically a fraction of the LEL. Assuring the flow sensor interlocks are properly set and operating will assure the airflow through the system is properly maintained, the press is operating as designed, and the design capture efficiency is achieved.

Inspections of the ductwork and dampers will ensure their integrity.

When necessary after equipment maintenance, or adjustment, a smoke test will verify capture (negative flow from the atmosphere into the exhaust system) at the test location.

(2) Rationale for Selection of Indicator Ranges

An initial performance test is conducted on the unenclosed press to demonstrate compliance with the capture efficiency required in the air pollution permit or as guaranteed by the manufacturer. The exhaust system flow rate also is documented during the capture efficiency test.

The level at which the low-flow sensor interlock activates is established by the manufacturer at the time of installation. It is set at a level to assure proper operation of the press and to maintain operation of the exhaust system. Maintaining airflow above this level assures the press is properly operating and provides a reasonable assurance that the capture efficiency is being maintained.

(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 ±1°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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria ± 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> <li>• External inspection - annually</li> <li>• Internal inspection - annually.</li> </ul>	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.
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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 dates of catalyst sampling, initials of person conducting sampling, 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	Quarterly	Annually.	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 of 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.

(c) Monitoring Approach For The Regenerative Thermal Oxidizer:

	Indicator #1	Indicator #2	Indicator #3
I. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction 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.
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.
III. Performance Criteria			
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone 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 the IDEM prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^{\circ}\text{F}$ .	Not applicable.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously	External inspection - annually. Internal inspection - annually.	Once every five years.
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.
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	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, including dates and initials of person conducting inspection, and of 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.
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.
Frequency	Quarterly	Annually.	For each performance test conducted.

(1) Rationale for Selection of Performance Indicators

The oxidizer combustion zone temperature was selected because it is indicative of a regenerative thermal oxidizer's operation. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected. If the combustion zone temperature decreases significantly, complete combustion may not occur.

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 during the permit term to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) Rationale for Selection of Indicator Ranges

The selected indicator range for the oxidizer combustion zone temperature is established based upon demonstrated performance during a performance test.

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

**D.3.9 Monitoring**

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- (a) The Permittee shall conduct quarterly inspections of all components relating to the capture system of press #36. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, I12) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

**D.3.10 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.1, 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.3.1.
  - (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 from press #36 using methods identified in condition D.3.4.
- (b) To document compliance with Conditions D.3.1, D.3.2, D.3.4, D.3.5, and D.3.7, the Permittee shall maintain records in accordance with (1) and (2) below:
  - (1) Continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for catalytic oxidizers I5, I6, I7, I8, I9, I10, I11 and I12, and the combustion zone temperature for the regenerative thermal oxidizer I13 (reduced to a three-hour average basis) and the three (3) hour average inlet temperature to the catalyst bed and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant performance test.
  - (2) Daily records of the monitoring parameter value (duct pressure, or fan amperage, or other parameter as approved by IDEM, OAQ and VCAPC).
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of each inspection or sample. These records shall include, as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions (if any are required).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.11 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.3.1 shall be submitted quarterly 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).

## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

(35) Closed solvent spray type parts washer exhausting to stack 20.

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

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

#### D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.4.2 Volatile Organic Compounds (VOC) [326 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
    - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

## SECTION D.5 FACILITY OPERATION CONDITIONS

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

- (6) Flexographic printing press, identified as press #11, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (7) Flexographic printing press, identified as press #12, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (8) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (9) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (10) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (11) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (12) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (13) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (37) Four (4) Catalytic Oxidizers identified as I1, I2, I3 and I4 and exhausting respectively through Stacks S1, S2, S3 and S4, each with a maximum heat input capacity of 3.0 million BTU per hour for the supplemental fuel, interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 and/or #18.

(Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)

(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.5.1 Prevention of Significant Deterioration - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the PSD BACT for Bemis Company shall be the following:

- (a) Whenever any of the presses #11, #12, #13, #14, #15, #16, #17 and #18 is applying VOC containing materials, each press exhaust must be vented through the operating catalytic oxidation control system, I1 through I4. Each press shall have a capture system efficiency of 100%. The catalytic oxidation control system shall have a minimum destruction efficiency of 95%.
- (b) The capture efficiency system for presses #11, #12, #13, #14, #15, #16, #17 and #18 shall be considered to achieve 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 condition shall satisfy the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

#### D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the capture system for presses #11, #12, #13, #14, #15, #16, #17 and #18 in combination with the catalytic oxidation system 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), the four (4) catalytic oxidizers (I1, I2, I3 and I4) shall maintain a minimum destruction efficiency of 90%.

#### Compliance Determination Requirements

#### D.5.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) Testing requirements for the destruction efficiency of the catalytic oxidizers are as follows:
  - (1) Testing of the catalytic oxidizers (I1, I2, I3 and I4) to verify their destruction efficiencies was performed on June 27, 2005.
  - (2) The oxidizers' destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.
- (b) Testing requirements for the capture efficiency of the flexographic presses are as follows:
  - (1) Within sixty (60) days after the issuance of permit SPM 167-21257-00033, the Permittee shall conduct a performance test to verify the system capture efficiencies of the six (6) printing presses (presses #13, #14, #15, #16, #17, and #18) as per Conditions D.5.1 and D.5.2 utilizing methods as approved by the Commissioner. Testing of presses #11 and #12 to verify their system captures efficiencies was performed on June 27, 2005.

- (2) The capture efficiency test shall be repeated for a press in this section whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:
  - (A) The addition of print station to a press,
  - (B) Increasing or decreasing the volumetric flow rate from the dryer (e.g. by changing the size of press fans/motors or removal or derating of dryers), or
  - (C) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

#### D.5.4 Oxidizer Temperature [326 IAC 2-2]

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- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the temperature at the inlet to the catalyst bed of each catalytic oxidizer in the control system used to control emissions from eight (8) printing presses (presses #11, #12, #13, #14, #15, #16, #17 and #18). 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C -Response to Excursions or Exceedances whenever the three (3) hour average inlet temperature to the catalyst bed of any catalytic oxidizer in the control system used to control emissions from the eight (8) printing presses (presses #11, #12, #13, #14, #15, #16, #17 and #18) 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- Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The Permittee shall determine the three (3) hour average temperature at the inlet to the catalyst bed of each catalytic oxidizer from the most recent valid performance test that demonstrates compliance with limits in Condition D.5.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average temperature at the inlet to the catalyst bed of any catalytic oxidizer is below the three (3) hour average temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.5.5 Oxidizer Grouping

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Catalytic oxidizers I1 through I4 have been interconnected with a common press exhaust plenum to form an oxidization control system. As a control system, the captured VOC emissions from any operating press (presses #11 through #18) is exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).

Presses #11 through #18 are each rated at 3500 cfm. Oxidizers I1 through I4 are each rated at 7000 cfm,

To prevent an uncontrolled release of captured VOC emissions:

- (a) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.
- (b) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.
- (c) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidation control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidation control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.
- (d) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.
- (e) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).

#### D.5.6 Parametric Monitoring

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- (a) The Permittee shall establish the appropriate monitoring parameter for each press (duct pressure, or fan amperage or differential pressure, or other parameter as approved by IDEM, OAQ and VCAPC) from the most recent performance test that demonstrates compliance with limits in Conditions D.5.1 and D.5.2.
- (b) The Permittee shall maintain one of the following permanent total enclosure monitoring parameter values for each press for each day the press is operating as an indication that 100 percent capture is being attained:
  - (1) Duct pressure or fan amperage - The Permittee shall maintain the flow indicator parameter at a value at least 85 percent of the value as established during the most recent performance test, or
  - (2) Differential pressure - The Permittee shall maintain a differential pressure at a value of - 0.007 inches of water column or less, or
  - (3) Differential pressure - The Permittee shall maintain a differential pressure at or less than a value demonstrated during the most recent performance test as being sufficient to meet the 200 feet/min face velocity at all NDOs.
- (c) The established permanent total enclosure monitoring parameter value shall be observed at least once per day for each day the press is operating.

#### D.5.7 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

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Pursuant to 40 CFR Part 64, the Permittee shall comply with the following compliance assurance monitoring requirements for presses #11, #12, #13, #14, #15, #16, #17, and #18:

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

	Indicator #1	Indicator #2	Indicator #3
<b>I. Indicator</b>	<b>Work Practice</b>	<b>Work Practice</b>	<b>Pressure differential</b>
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.
<b>II. Indicator Range</b>	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 -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 satisfy 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.
<b>III. Performance Criteria</b>			
<b>A. Data Representativeness</b>	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>B. Verification of Operational Status</b>	Inspection records.	Inspection records.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated.
<b>C. QA/QC Practices and Criteria</b>	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.
<b>D. Monitoring Frequency</b>	Quarterly	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.



	Indicator #1	Indicator #2	Indicator # 3
E. Recordkeeping	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting 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	Quarterly.	Annually.	Quarterly

(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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 ±1°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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria + 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> <li>• External inspection - annually</li> <li>• Internal inspection - annually.</li> </ul>	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.
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 dates of catalyst sampling, initials of person conducting sampling, 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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
Frequency	Quarterly	Annually	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 of 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.

D.5.8 Monitoring [326 IAC 2-2]

- (a) The Permittee shall conduct quarterly inspections of all components relating to the capture system of each press #11, #12, #13, #14, #15, #16, #17 and #18. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the four (4) catalytic oxidizers (I1, I2, I3 and I4) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Accidences. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.5.9 Record Keeping Requirements

- (a) To document compliance with Condition D.5.1, D.5.2, D.5.4, and D.5.6 the Permittee shall

maintain records in accordance with (1) and (2) below.

- (1) The continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for the catalytic oxidizers I1 through I4 and the three (3) hour average inlet temperature to the catalyst bed used to demonstrate compliance during the most recent compliant performance test.
  - (2) Daily record of the permanent total enclosure monitoring parameter value (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM, OAQ and VCAPC).
- (b) To document compliance with Condition D.5.8, the Permittee shall maintain records of inspections or sample. These records shall include as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions (if any are required).
- (c) All records shall be maintained in accordance with the Part 70 Section C - General Record Keeping Requirements.

## SECTION D.6

## FACILITY OPERATION CONDITIONS

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

- (1) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6-1-2]
- (2) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2]
- (3) "Oxydry" Anti-offset powder (cornstarch) applied to printed film, insignificant PM source. [326 IAC 6-1-2]
- (4) Polyethylene extrusion process, resins and manufacturing film using the blown film process, insignificant PM and VOC source. [326 IAC 6-1-2]

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

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

#### D.6.1 Particulate Emission Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a) emissions from these facilities shall not exceed 0.03 grain per dry standard cubic foot.

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

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Bemis Company, Inc.  
Source Address: 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218  
Mailing Address: P.O. Box 905, Terre Haute, IN 47808-0905  
Part 70 Permit No.: T167-6182-00033

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**VIGO COUNTY AIR POLLUTION CONTROL  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807  
Phone: 812-462-3433  
Fax: 812-462-3447**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Bemis Company, Inc.  
Source Address: 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218  
Mailing Address: P.O. Box 905, Terre Haute, IN 47808-0905  
Part 70 Permit No.: T167-6182-00033

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC), within four (4) business hours (IDEM: 1-800-451-6027 or 317-233-0178, ask for Compliance Section and VCAPC: 812-462-3433); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (IDEM Facsimile Number: 317-233-6865 and VCAPC Facsimile Number: 812-462-3447), and follow the other requirements of 326 IAC 2-7-16.</li></ul>
--

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM <sub>10</sub> , SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.



**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 Avenue, Terre Haute, IN 47804-4218  
Mailing Address: P.O. Box 905, Terre Haute, IN 47808-0905  
Part 70 Permit No.: T167-6182-00033  
Facility: Press #36  
Parameter: VOC emission  
Limit: Not to exceed 39.99 tons per 12 consecutive month period with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Press #36		
	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total
1			
2			
3			

- No deviation occurred in this quarter.
- 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  
COMPLIANCE DATA SECTION  
and  
VIGO COUNTY AIR POLLUTION CONTROL**

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Bemis Company, Inc.  
Source Address: 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218  
Mailing Address: P.O. Box 905, Terre Haute, IN 47808-0905  
Part 70 Permit No.: T167-6182-00033

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed 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**

Addendum to the Technical Support Document (TSD) for a PSD / Significant Source Modification and a Significant Permit Modification to a Part 70 Operating Permit

<b>Source Description and Location</b>	
<b>Source Name:</b>	<b>Bemis Company, Inc.</b>
<b>Source Location:</b>	<b>1350 North Fruitridge Avenue Terre Haute, IN 47804-4218</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>2673, 3081, 3079</b>
<b>Operation Permit No.:</b>	<b>167-6182-00033</b>
<b>Operation Permit Issuance Date:</b>	<b>June 28, 2004</b>
<b>Source Modification No.:</b>	<b>167-23761-00033</b>
<b>Permit Modification No.:</b>	<b>167-23850-00033</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

On March 13, 2007, the Office of Air Quality (OAQ) had a notice published in the *Terre Haute Tribune Star* stating that Bemis Company, Inc. had applied for a Significant Source Modification and a Significant Permit Modification to a Part 70 Operating Permit issued on June 28, 2004. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Bemis Company, Inc. to add two (2) new flexographic printing presses to the plant and to operate two (2) existing presses under the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Dan Rose of Bemis Company, Inc. submitted comments on the proposed modification. The summary of the comments and the corresponding responses are indicated below. Bolded language indicates that has been added, and language with a line through it indicates that language has been deleted.

<b>Comment 1:</b>
Item (37) does not belong in the facility description in Section D.2.

<b>Response 1:</b>
OAQ agrees with the comment. Item (37) belongs in the facility description in Section D.5 only, where it already appears. The facility description in Section D.2 has been changed as follows:

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

*[Items (14) through (29) remain unchanged.]*

*[Items (31) through (34) remain unchanged.]*

~~(37) Four (4) Catalytic Oxidizers identified as I1, I2, I3 and I4 and exhausting respectively through Stacks S1, S2, S3 and S4, each with a maximum heat input capacity of 3.0 million BTU per hour for the supplemental fuel, interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 and/or #18.~~

~~(Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)~~

*[Items (38) through (46) remain unchanged.]*

(Note: Each individual oxidizer I5, I6, I7, I8, I9, I10, I11 and I12 is only capable of handling air flow from two of the presses at a time, and the RTO, I13, is capable of handling air flow from eight to twelve of the presses at a time.)

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

**Comment 2:**

The testing requirements of Condition D.2.3(a) and (b) should reference only the two new facilities, press #39 and press #40.

**Response 2:**

The intent of Condition D.2.3 is to address all of the testing requirements which pertain to the emission units and control devices listed in the facility description of Section D.2. However, not every requirement in Condition D.2.3 applies to every emission unit or control device.

Condition D.2.3(a) applies to the catalytic oxidation units I5 through I12 and the thermal oxidation unit I13, independent of the presses controlled by those oxidation units. The testing requirements for those oxidation units are unaffected by the proposed modification.

Condition D.2.3(b)(1) does not apply to presses #37, #38, #39 or #40. The testing requirements for the presses which Condition D.2.3(b)(1) covers are unaffected by the proposed modification.

Condition D.2.3(b)(2) applies only to the existing presses #37 and #38. The condition acknowledges that capture efficiency testing has already been performed on presses #37 and #38. Capture efficiency testing for presses #37 and #38 will not need to be repeated unless Condition D.2.3(b)(5) would require it.

Conditions D.2.3(b)(3) and (4) apply only to the new presses #39 and #40. An initial capture efficiency test will be required for each of these two presses.

Condition D.2.3(b)(5) applies to all presses listed in the facility description of Section D.2 of the permit. This condition would require retesting in the event that certain changes take place which render the previous capture efficiency test results obsolete.

There are no changes to the draft permit due to this comment.

**Comment 3:**

The testing requirements of Condition D.3.3(a) and Condition D.5.3(b) are not needed. The same also applies in the Technical Support Document.

**Response 3:**

Condition D.3.3(a) is duplicative of Condition D.2.3(a) and can instead be replaced with a reference of the need to comply with Condition D.2.3(a). Condition D.3.3(a) has been changed as follows:

**D.3.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]**

- (a) Testing requirements for the destruction efficiency of the thermal and catalytic oxidizers are **listed in Condition D.2.3 of this permit.** as follows:
- (1) ~~Within sixty (60) days after the start up of the new regenerative thermal oxidizer (113), the Permittee shall conduct a performance test to verify its VOC destruction efficiency as per Conditions D.3.1 and D.3.2.~~
  - (2) ~~Testing of the catalytic oxidizers (15, 16, 17, 18, 19, 110, 111 and 112) to verify their destruction efficiencies was performed on April 17, 2006.~~
  - (3) ~~The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.~~
- (b) The capture efficiency test performed on October 27, 2004 for press #36, shall be repeated whenever a reconfiguration or change in its design is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this press, which include any of the following:
- (1) The addition of a print station to the press,
  - (2) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers), or
  - (3) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

Condition D.5.3(b) is not duplicative of Condition D.2.3(a) or Condition D.3.3(a) because it refers to a different group of oxidation units. Condition D.5.3(b) will not be changed.

OAQ does not change the Technical Support Document directly; it will be preserved as a record of the initial review. Instead, the changes are acknowledged by this addendum, which supersedes the original Technical Support Document.

**Comment 4:**

On Page 6 of the Technical Support Document, press #36 should not be included as it has no permanent enclosure.

**Response 4:**

Page 6 of the Technical Support Document should state that the same CAM Plan submitted for presses #37, #38, #39 and #40 has already been approved for the existing presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #34, and #35. Press #36 should be excluded from the list in the TSD. There are no changes to the draft permit due to this comment, since Press #36 is already excluded from the list in Condition D.2.7.

**Comment 5:**

Page 16 of the Technical Support Document did not add combustion zone language.

**Response 5:**

For the purpose of compliance determination, the operating temperature for the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) is the catalyst bed inlet temperature, but the operating temperature for the regenerative thermal oxidizer (I13) is the combustion zone temperature. Although this distinction is present in the permit and in the discussion about the CAM Plan in the Technical Support Document, it was omitted in the Compliance Determination Requirements section of the Technical Support Document. There are no changes to the draft permit due to this comment.

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

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

**Source Description and Location**

<b>Source Name:</b>	<b>Bemis Company, Inc.</b>
<b>Source Location:</b>	<b>1350 North Fruitridge Avenue Terre Haute, IN 47804-4218</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>2673, 3081, 3079</b>
<b>Operation Permit No.:</b>	<b>167-6182-00033</b>
<b>Operation Permit Issuance Date:</b>	<b>June 28, 2004</b>
<b>Source Modification No.:</b>	<b>167-23761-00033</b>
<b>Permit Modification No.:</b>	<b>167-23850-00033</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

**Existing Approvals**

The emission source was issued Part 70 Operating Permit 167-6182-00033 on June 28, 2004. The source has since received the following approvals:

- (a) Significant Source Modification 167-19667-00033, issued on May 2, 2005, which subjected existing flexographic printing presses #11 and #12 to review under the Prevention of Significant Deterioration (PSD) rules pursuant to 326 IAC 2-2.
- (b) Significant Permit Modification 167-19669-00033, issued on June 20, 2005, which incorporated Significant Source Modification 167-19667-00033 into the Part 70 operating permit.
- (c) Significant Source Modification 167-21605-00033, issued on January 5, 2006, which authorized construction of flexographic printing presses #37 and #38, with emissions controlled by oxidation.
- (d) Significant Permit Modification 167-21603-00033, issued on January 20, 2006, which incorporated Significant Source Modification 167-21605-00033 into the Part 70 operating permit.
- (e) Significant Source Modification 167-20981-00033, issued on September 18, 2006, which subjected existing flexographic printing presses #13 through #25 and #27 through #35 to review under the Prevention of Significant Deterioration (PSD) rules pursuant to 326 IAC 2-2.
- (f) Significant Permit Modification 167-21257-00033, issued on November 13, 2006, which incorporated Significant Source Modification 167-20981-00033 into the Part 70 operating permit.

**County Attainment Status**

The emission source is located in Vigo County.



Pollutant	Status
PM <sub>10</sub>	attainment
PM <sub>2.5</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

The permanent revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana took effect on October 25, 2006.

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Vigo County has been classified as attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions.
- (c) Vigo County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

See "Permit Level Determination - PSD" for more details regarding PSD rule applicability.

**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	Potential to Emit (tons/yr)
PM	less than 100
PM <sub>10</sub>	less than 100
SO <sub>2</sub>	less than 100
VOC	greater than 250
CO	less than 100
NO <sub>x</sub>	less than 100

- (a) This emission source, a polyethylene packaging manufacturing plant, is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

- (b) This existing source is classified as a major stationary source under PSD (326 IAC 2-2). Although it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), a regulated pollutant is emitted at a rate of 250 tons per year or more.

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

HAPs	Potential to Emit (tons/yr)
Single HAP	less than 10
Total HAPs	less than 25

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

#### Actual Emissions

The following table shows the actual emissions from the source in 2005, the most recent calendar year for which the Permittee's annual emission statement data is available:

Pollutant	Potential to Emit (tons/yr)
PM	n/a
PM <sub>10</sub>	0.9
SO <sub>2</sub>	0.1
VOC	731.6
CO	10.0
NO <sub>x</sub>	11.9

#### Background and Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Bemis Company, Inc. on October 16, 2006, relating to the operation of a polyethylene packaging manufacturing plant located at 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218. The application involves a request to add two (2) new flexographic printing presses identified as presses #39 and #40 and to review two (2) existing presses identified as presses #37 and #38 under the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2.

Presses #37 and #38 were both originally permitted under Significant Source Modification 167-21605-00033, issued on January 5, 2006, with emissions controlled by oxidation and a VOC emission limit of less than 40 tons per year, such that the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, do not apply. These two presses will be issued a new permit to remove the VOC emission limit. This will require review under 326 IAC 2-2.

#### New Emission Units and Pollution Control Equipment

The application includes information relating to the prior approval for the construction and operation of the following equipment:

- (a) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

The maximum line speeds and printing widths for these presses are being treated as confidential information under 326 IAC 17.1.

#### Existing Emission Units and Pollution Control Equipment

The application includes information relating to the prior approval for the operation of the following equipment:

- (a) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

The maximum line speeds and printing widths for these presses are being treated as confidential information under 326 IAC 17.1.

#### Insignificant Activities

This application does not involve any insignificant activities, as defined in 326 IAC 2-7-1(21).

#### Enforcement Issues

There are no enforcement actions pending against this emission source.

#### **Stack Summary**

The new emission units will utilize existing control devices and exhaust stacks. As a result, stack information will not change as a result of this application.

#### **Emission Calculations**

See Appendix A of this document for detailed emission calculations.

#### **Permit Level Determination – Part 70**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

Presses #37 and #38 were both originally permitted under Significant Source Modification 167-21605-00033, issued on January 5, 2006, with emissions controlled by oxidation and a VOC emission limit of less than 40 tons per year. Since that modification will become a major

modification solely by virtue of a relaxation in an enforceable limitation, the potential to emit for this application is being evaluated as though construction had not yet commenced on presses #37 and #38.

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	0.0
PM <sub>10</sub>	0.2
SO <sub>2</sub>	0.0
VOC	4605.6
CO	1.8
NO <sub>x</sub>	2.1

HAPs	Potential to Emit (tons/yr)
Hexane	0.04
Total	0.04

**Justification for Significant Source Modification**

The source modification involves a modification where the increase in potential to emit is greater than twenty-five (25) tons per year of volatile organic compounds (VOC). As a result, this change is classifiable as a significant source modification under 326 IAC 2-7-10.5(d)(3).

**Justification for Significant Permit Modification**

The permit modification involves establishing new conditions related to the PSD rules and is classifiable as a modification under provisions of Title I of the Clean Air Act. As a result, this change can neither be processed as an administrative amendment under 326 IAC 2-7-11 or a minor permit modification under 2-7-12(b). It must be processed as a significant permit modification under 326 IAC 2-7-12(d).

**Permit Level Determination - PSD**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 Significant Source Modification and Significant Permit Modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Emission Unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Flexographic Printing Press #37	0.00	0.00	0.00	0.00	45.52	0.00
Flexographic Printing Press #38	0.00	0.00	0.00	0.00	45.52	0.00
Flexographic Printing Press #39	0.00	0.00	0.00	0.00	69.62	0.00
Flexographic Printing Press #40	0.00	0.00	0.00	0.00	69.62	0.00
Fuel Combustion: Natural Gas	0.04	0.16	0.01	2.09	0.12	1.76
<b>Total</b>	<b>0.04</b>	<b>0.16</b>	<b>0.01</b>	<b>2.09</b>	<b>230.40</b>	<b>1.76</b>
PSD Significant Levels:	25	15	40	40	40	100

This modification to an existing major stationary source is major because the emissions increase of volatile organic compounds (VOC) is greater than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements apply.

### Federal Rule Applicability Determination

#### 326 IAC 12 and 40 CFR Part 60 (New Source Performance Standards (NSPS))

There are no New Source Performance Standards applicable to this proposed modification. 40 CFR 60 Subpart QQ, "Standards Of Performance For The Graphic Arts Industry: Publication Rotogravure Printing," is not applicable since the printing presses at this source are not rotogravure printing presses.

#### 326 IAC 14, 326 IAC 20 and 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants (NESHAPs))

40 CFR 63 Subpart KK, "National Emission Standards for the Printing and Publishing Industry," is applicable since the printing presses at this source are wide-web flexographic printing presses. However, because the source is not a major source of HAPs, the source is subject only to the provisions of 40 CFR 63.829(d) (Recordkeeping requirements) and 40 CFR 63.830(b)(1) (Reporting requirements) as necessary to demonstrate area source status.

#### 40 CFR Part 64 (Compliance Assurance Monitoring)

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

- (a) have a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
- (b) are subject to an emission limitation or standard for that pollutant; and
- (c) use a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Each of presses #37, #38, #39 and #40 meet the above criteria and therefore, are subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring.

The source has submitted the following CAM Plan for presses #37, #38, #39 and #40. The same CAM Plan has already been approved for the existing presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35 and #36:

#### Permanent Total Enclosure (PTE):

- (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 have 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 -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.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated.
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	Quarterly	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.

	Indicator #1	Indicator #2	Indicator # 3
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, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, 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	Quarterly.	Annually.	Quarterly.

(b) 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.

(c) 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.

Catalytic Oxidizers

(a) 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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	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"> <li>• External inspection – annually</li> <li>• Internal inspection – annually.</li> </ul>	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.
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.



	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 dates of catalyst sampling, initials of person conducting sampling, 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	Quarterly.	Annually.	For each performance test conducted.	Annually.

(b) 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).

(c) 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.

Regenerative Thermal Oxidizer

(a) Monitoring Approach for the Regenerative Thermal Oxidizer

	Indicator #1	Indicator #2	Indicator #3
I. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction 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.
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.
III. Performance Criteria			
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone 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 the IDEM prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^{\circ}\text{F}$ .	Not applicable.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously	External Inspection - annually Internal inspection - annually.	Once every five years.
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.
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	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, including dates and initials of person conducting inspection, and of 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.

	Indicator #1	Indicator #2	Indicator #3
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.
Frequency	Quarterly.	Annually.	For each performance test conducted.

(b) Rationale for Selection of Performance Indicators

The oxidizer combustion zone temperature was selected because it is indicative of a regenerative thermal oxidizer's operation. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected. If the combustion zone temperature decreases significantly, complete combustion may not occur.

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 during the permit term to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(c) Rationale for Selection of Indicator Ranges

The selected indicator range for the oxidizer combustion zone temperature is established based upon demonstrated performance during a performance test.

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

**State Rule Applicability Determination – Entire Source**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is a major source for Prevention of Significant Deterioration, 326 IAC 2-2. Although it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), a regulated pollutant is emitted at a rate of 250 tons per year or more.

This modification to an existing major stationary source is major for Prevention of Significant Deterioration (PSD) because the emissions increase of volatile organic compounds (VOC) is greater than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements apply to this modification.

### 326 IAC 2-2-3 (Control Technology Review Requirements)

Pursuant to 326 IAC 2-2-3, a major modification shall apply best available control technology (BACT) for each regulated pollutant for which the modification would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase of the pollutant would occur as a result of a physical change or change in the method of operation in the unit. The affected emission units are presses #37, #38, #39 and #40, which shall apply BACT for volatile organic compounds (VOC).

See Appendix B of this document for details regarding the BACT determination for presses #37, #38, #39 and #40.

### 326 IAC 2-2-4 (Air Quality Analysis Requirements)

Pursuant to 326 IAC 2-2-4(a), any application for a permit under 326 IAC 2-2 shall contain an analysis of ambient air quality in the area that the major modification would affect for each regulated NSR pollutant for which the modification would result in a significant emission increase.

See Appendix C of this document for details regarding the air quality analysis for presses #37, #38, #39 and #40.

### 326 IAC 2-2-5 (Air Quality Impact Requirements)

- (a) Pursuant to 326 IAC 2-2-5(a), the owner or operator of the proposed major modification shall demonstrate that allowable emissions increases in conjunction with all applicable emissions increases or reductions (including secondary emissions) will not cause or contribute to air pollution in violation of any:
  - (1) ambient air quality standard, as designated in 326 IAC 1-3, in any air quality control region; or
  - (2) applicable maximum allowable increase over the baseline concentration in any area as described in 326 IAC 2-2-6.
- (b) 326 IAC 2-2-5(e) states that an air quality impact analysis required by this section shall be conducted in accordance with the following provisions:
  - (1) Any estimates of ambient air concentrations used in the demonstration processes required shall be based upon the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W (Requirements for Preparation, Adoption, and Submittal of Implementation Plans, Guideline on Air Quality Models).
  - (2) Where an air quality impact model specified in the guidelines cited in (1) is inappropriate, a model may be modified or another model substituted provided that all applicable guidelines are satisfied.
  - (3) Modifications or substitution of any model may only be done in accordance with guideline documents and with written approval from U.S. EPA and shall be subject to public comment procedures set forth in 326 IAC 2-1.1-6.

See Appendix C of this document for details regarding the air quality impact analysis for presses #37, #38, #39 and #40.

### 326 IAC 2-2-7 (Additional Analysis Requirements)

- (a) 326 IAC 2-2-7(a) requires an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the major modification.
- (b) 326 IAC 2-2-7(b) requires an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the major modification.

See Appendix C of this document for details regarding the additional analysis requirements for presses #37, #38, #39 and #40.

### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs.

### 326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, this source is subject to 326 IAC 2-6 (Emission Reporting). Also, the source has potential to emit greater than the thresholds in 326 IAC 2-6-3(a)(1). Therefore, pursuant to 326 IAC 2-6-3(a)(1), an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

### 326 IAC 2-7 (Part 70 Permit Program)

The potential to emit of volatile organic compounds (VOC) is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

<b>State Rule Applicability Determination – Presses #37, #38, #39 and #40</b>
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### 326 IAC 8-5-5 (Graphic Arts Operations)

Presses #37, #38, #39 and #40 are subject to 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 of VOC per year.

- (a) Pursuant to 326 IAC 8-5-5(c)(3), volatile organic compound (VOC) emissions will be controlled by an incineration system that oxidizes at least ninety percent (90%) of the nonmethane volatile organic compounds to carbon dioxide and water.

Each of Presses #37, #38, #39 and #40 shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%. This results in a 95% overall control efficiency, which complies with the requirement.

- (b) Pursuant to 326 IAC 8-5-5(c)(4), the ink, as applied to the substrate, shall meet an emission limit of five-tenths (0.5) pound of volatile organic compound per pound of solids in the ink.

OAQ has verified that the inks to be used by Presses #37, #38, #39 and #40 meet the emission limit after controls. However, the exact amount of volatile organic compound per pound of solids in the ink is being treated by OAQ as confidential information.

- (c) 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.

Each of Presses #37, #38, #39 and #40 shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%. This results in a 95% overall control efficiency, which complies with the requirement.

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

Presses #37, #38, #39 and #40 are not subject to 326 IAC 8-1-6 (General Reduction Requirements). This rule does not apply since these presses are subject to 326 IAC 8-5-5.

### **Compliance Determination and Monitoring Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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.

OAQ has evaluated the Compliance Determination Requirements and recommends the following:

- (a) Within sixty (60) days after the start up of the new regenerative thermal oxidizer (I13), the Permittee shall conduct a performance test to verify its VOC destruction efficiency utilizing methods as approved by the Commissioner. Testing of the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) to verify their destruction efficiencies was performed on April 17, 2006. Since the destruction efficiency of each oxidizer is independent of which presses are venting to it, the most recent valid compliance demonstration will serve as the initial destruction efficiency tests for presses #37, #38, #39 and #40. The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.
- (b) Testing of the capture efficiency was performed on presses #37 and #38 on April 17, 2006. Since the capture system of presses #37 and #38 will not be changed as a result of this modification, the most recent valid compliance demonstration will serve as the initial capture efficiency tests for presses #37 and #38. Within sixty (60) days after achieving the maximum rated capacity at which each of presses #39 and #40 will be operated, but no later than 180 days after startup of that press, the Permittee shall conduct a performance test to verify the capture efficiency utilizing methods as approved by the Commissioner.
- (c) The capture efficiency test shall be repeated for a press whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of the presses, which include any of the following:
  - (1) The addition of a print station to a press,
  - (2) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers), or
  - (3) Changing the static duct pressure.
- (d) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of each oxidizer in the control system used to control emissions from presses #37, #38, #39 and #40.
- (e) The established permanent total enclosure monitoring parameter value shall be observed at least once per day for each day the press is operating.
- (f) Pursuant to 40 CFR Part 64, the Permittee shall comply with the Compliance Assurance Monitoring (CAM) Plan listed in the Federal Rule Applicability Determination section of this document. The Permittee's CAM Plan will also be used to satisfy the Part 70 monitoring requirements.
- (g) The Permittee will also be required to conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, I12) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk.

### Proposed Changes

In addition to the changes directly related to the modification, OAQ made the following revisions to the Part 70 permit:

- (a) Section A - General Information, has been updated. The "responsible official" will no longer be listed in the permit. Also, due to changes to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana, Vigo County is now classified as attainment for all criteria pollutants and the source is classified as major under PSD Rules instead of the Emission Offset rules.
- (b) Bemis Company, Inc. has removed from operation presses #6 and #7, and inline portable printers #11, #17, #18 and #19, and requested that the emission units be deleted from the permit.
- (c) Section B - Compliance with Permit Conditions, has been removed from the permit. Its requirements already appear on Page 1 of the permit. Also, subsequent Section B conditions were renumbered.
- (d) OAQ updated the telephone and facsimile numbers of the Compliance Branch. All instances of "317-233-5674" in the permit have been changed to read "317-233-0178" and all instances of "317-233-5967" have been changed to read "317-233-6865".
- (e) OAQ updated Section C - General Record Keeping Requirements to remove language that is not applicable under the New Source Review reform.
- (f) Section D.6 of the permit, which existed solely to address the VOC emission limit imposed on presses #37 and #38, will no longer be needed. The control devices in Section D.6 already have corresponding conditions in Section D.2. Therefore, Section D.6 will be deleted in its entirety.
- (g) The Table of Contents has been revised accordingly.

The changes listed below are being proposed to Part 70 Operating Permit No. 167-6182-00033. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:



A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary polyethylene film plant including film production, printing, and converting operations.

Responsible Official: ~~Plant Manager~~  
Source Address: 1350 North Fruitridge Ave., Terre Haute, Indiana 47804  
Mailing Address: PO Box 905, Terre Haute, Indiana 47808  
General Source Phone Number: (812) 466-2213  
SIC Code: 2673, 3081, and 3079  
County Location: Vigo County  
Source Location Status: ~~Nonattainment for ozone under the 8-hour standard~~  
~~Maintenance Attainment for Sulfur Dioxide (SO<sub>2</sub>)~~  
Attainment for all other criteria pollutants  
Source Status: Part 70 Permit Program  
Minor ~~Major~~ Source, under PSD Rules;  
~~Major Source, under Emission Offset~~  
Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.
- (2) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.
- (3) ~~Flexographic printing press, identified as press #6, installed in 1969, using no control, and exhausting to stack 206.~~
- (4) ~~Flexographic printing press, identified as press #7, installed in 1974, using no control, and exhausting to stack 207.~~
- (5) (3) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.
- (6) (4) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.
- (7) (5) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.
- (8) (6) Flexographic printing press, identified as press #11, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (9) (7) Flexographic printing press, identified as press #12, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (10) (8) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.

- (11)(9) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (12)(10) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (13)(11) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (14)(12) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (15)(13) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (16)(14) Flexographic printing press, identified as press #19, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (17)(15) Flexographic printing press, identified as press #20, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (18)(16) Flexographic printing press, identified as press #21, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (19)(17) Flexographic printing press, identified as press #22, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (20)(18) Flexographic printing press, identified as press #23, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (21)(19) Flexographic printing press, identified as press #24, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (22)(20) Flexographic printing press, identified as press #25, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (23)(21) Flexographic printing press, identified as press #27, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (24)(22) Flexographic printing press, identified as press #28, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (25)(23) Flexographic printing press, identified as press #29, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (26)(24) Flexographic printing press, identified as press #30, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (27)(25) Flexographic printing press, identified as press #31, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28)(26) Flexographic printing press, identified as press #32, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

- (29)(27) Flexographic printing press, identified as press #33, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (30)(28) Flexographic printing press, identified as press #34, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (31)(29) Flexographic printing press, identified as press #35, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (32) ~~Flexographic in-line printer attached to extruder #11, identified as E-11, using no control, and primarily exhausting to stack 111.~~
- (33)(30) Flexographic printing press, identified as press #36, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (34)(31) Flexographic printing press, identified as press #37, **constructed in 2006**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (35)(32) Flexographic printing press, identified as press #38, **constructed in 2006**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (33) **Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.**
- (34) **Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.**
- (36)(35) Closed solvent spray type parts washer exhausting to stack 20.
- (37)(36) Cyrel plate making facility exhausting to stack 23.
- (38)(37) Four (4) Catalytic Oxidizers identified as I1, I2, I3 and through I4 and exhausting **respectively** through Stacks S1, S2, S3 and through S4, each with a maximum heat input capacity of 3.0 million BTU ~~British thermal units~~ per hour **for the supplemental fuel**, (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 **and/or** through #18.
- (Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)
- (39)(38) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 **and/or** #40, and exhausting to stack 5.

- (40)(39) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- (41)(40) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- (42)(41) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- (43)(42) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- (44)(43) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.
- (45)(44) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.
- (46)(45) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.
- (47)(46) Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.
- (48) — Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.
- (49) — Flexographic in-line portable printer attached to extruder #18, identified as E18, installed in 1986, using no control, and exhausting to stack 118.

- (50) — ~~Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.~~
- (51)(47) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack 241.
- (52)(48) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- (53)(49) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- (54)(50) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.
- (55)(51) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.
- (56)(52) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.
- (57)(53) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.
- (58)(54) Storage tank for hazardous waste storage of ink, identified as T8, capacity of 6,000 gallons, exhausting to stack 248.

~~B.9 — Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]~~

- (a) — ~~The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:~~
  - (1) — ~~Enforcement action;~~
  - (2) — ~~Permit termination, revocation and reissuance, or modification; or~~
  - (3) — ~~Denial of a permit renewal application.~~
- (b) — ~~Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.~~
- (c) — ~~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 conditions of this permit.~~
- (d) — ~~An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.~~

*[Conditions subsequent to B.9 were renumbered.]*

**B.13 B.12 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
  
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

**IDEM**

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-5674 **317-233-0178** (ask for Compliance Section)  
Facsimile Number: 317-233-5967 **317-233-6865**

**VCAPC**

Telephone Number: 812-462-3433  
Facsimile Number: 812-462-3447

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ and VCAPC, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and VCAPC, telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B.21 B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]**

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and VCAPC, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).



- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, VCAPC, or U.S. EPA is required.
- (a)(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6][326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) ~~If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:~~

**If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit or at a source with Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with following:**

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
  - (A) A description of the project.
  - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (i) Baseline actual emissions;
  - (ii) Projected actual emissions;
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3); and
  - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (1) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.
- (2) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.
- ~~(3) Flexographic printing press, identified as press #6, installed in 1969, using no control, and exhausting to stack 206.~~
- ~~(4) Flexographic printing press, identified as press #7, installed in 1974, using no control, and exhausting to stack 207.~~
- ~~(5)~~ (3) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.
- ~~(6)~~ (4) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.
- ~~(7)~~ (5) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.
- ~~(37)~~(36) Cyrel plate making facility exhausting to stack 23.
- ~~(51)~~(47) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack 241.
- ~~(52)~~(48) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- ~~(53)~~(49) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- ~~(54)~~(50) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.
- ~~(55)~~(51) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.
- ~~(56)~~(52) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.
- ~~(57)~~(53) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.
- ~~(58)~~(54) Storage tank for hazardous waste storage of ink, identified as T8, capacity of 6,000 gallons, exhausting to stack 248.

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

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (14)(14) Flexographic printing press, identified as press #19, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (15)(15) Flexographic printing press, identified as press #20, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (16)(16) Flexographic printing press, identified as press #21, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (17)(17) Flexographic printing press, identified as press #22, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (18)(18) Flexographic printing press, identified as press #23, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (19)(19) Flexographic printing press, identified as press #24, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (20)(20) Flexographic printing press, identified as press #25, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (21)(21) Flexographic printing press, identified as press #27, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (22)(22) Flexographic printing press, identified as press #28, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (23)(23) Flexographic printing press, identified as press #29, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (24)(24) Flexographic printing press, identified as press #30, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (25)(25) Flexographic printing press, identified as press #31, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (26)(26) Flexographic printing press, identified as press #32, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (27)(27) Flexographic printing press, identified as press #33, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28)(28) Flexographic printing press, identified as press #34, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (29)(29) Flexographic printing press, identified as press #35, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

- ~~(34)~~**(31)** Flexographic printing press, identified as press #37, **constructed in 2006**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- ~~(35)~~**(32)** Flexographic printing press, identified as press #38, **constructed in 2006**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (33)** Flexographic printing press, identified as press #39, **permitted to construct in 2007**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (34)** Flexographic printing press, identified as press #40, **permitted to construct in 2007**, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- ~~(38)~~**(37)** Four (4) Catalytic Oxidizers identified as I1, I2, I3 and through I4 and exhausting **respectively** through Stacks S1, S2, S3 and through S4, each with a maximum heat input capacity of 3.0 million BTU British thermal units per hour **for the supplemental fuel**, (~~mm~~Btu/hr) are interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 and/or through #18.
- (Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)
- ~~(39)~~**(38)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 5.
- ~~(40)~~**(39)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- ~~(41)~~**(40)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- ~~(42)~~**(41)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- ~~(43)~~**(42)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- ~~(44)~~**(43)** 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.

(45)(44)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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.

(46)(45)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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.

(47)(46)Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.

(Note: Each individual oxidizer I5, I6, I7, I8, I9, I10, I11 and through I12 is only capable of handling air flow from two of the nineteen (19) presses (#19 through #25 and #27 through #38) at a time, and the RTO, I13, is capable of handling air flow from eight to twelve of the nineteen (19) presses (#19 through #25 and #27 through #38) at a time.)

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

#### D.2.1 Prevention of Significant Deterioration - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the PSD BACT for Bemis Company shall be the following:

- (a) Whenever any of the presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, #37, #38, #39 or #40 is applying VOC containing materials, each press exhaust must the exhaust from that press shall 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%.
- (b) The capture system for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, #37, #38, #39 and #40 shall be considered to achieve one-hundred percent (100%) capture efficiency 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 ~~(C)~~(3) and are not included in the calculation in ~~(D)~~(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 condition shall satisfy the requirements of 326 IAC 2-2, Prevention of Significant Deterioration.

#### D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the VOC capture systems on ~~the sixteen (16) printing presses (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, #37, #38, #39 and #40)~~, in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner as to attain and maintain a minimum 60% overall control efficiency for flexographic printing.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (15, 16, 17, 18, 19, 110, 111 and ~~through~~ 112) and regenerative thermal oxidizer (113) shall maintain a minimum destruction efficiency of 90%.

#### D.2.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) **Testing requirements for the destruction efficiency of the thermal and catalytic oxidizers are as follows:**
  - (1) Within sixty (60) days after the start up of the new regenerative thermal oxidizer (113), the Permittee shall conduct a performance test to verify its VOC destruction efficiency as per Conditions D.2.1 and D.2.2 utilizing methods as approved by the Commissioner.
  - (2) Testing of the catalytic oxidizers (15, 16, 17, 18, 19, 110, 111 and ~~through~~ 112) to verify their destruction efficiencies was performed on April 17, 2006.
  - (3) The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

- (b) **Testing requirements for the capture efficiency of the flexographic presses are as follows:**
- (1) Within sixty (60) days after the issuance of permit SPM 167-21257-00033, the Permittee shall conduct a performance test to verify the system capture efficiencies of the sixteen (16) printing presses (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35) as per Conditions D.2.1 and D.2.2 utilizing methods as approved by the Commissioner.
  - (2) **Testing of the capture efficiency was performed on presses #37 and #38 on April 17, 2006.**
  - (3) **Within sixty (60) days after achieving the maximum rated capacity at which press #39 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the capture efficiency utilizing methods as approved by the Commissioner.**
  - (4) **Within sixty (60) days after achieving the maximum rated capacity at which press #40 will be operated, but no later than 180 days after startup, the Permittee shall conduct a performance test to verify the capture efficiency utilizing methods as approved by the Commissioner.**
  - (5) The capture efficiency test shall be repeated **for a press in this section** whenever a reconfiguration or change in the design of the presses in this section **that press** is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of the presses, which include any of the following:
    - (a) (A) The addition of a print station to a press,
    - (b) (B) Increasing or decreasing the volumetric flow rate from the dryer (e.g. by changing the size of press fans/motors or removal or derating of dryers),  
or
    - (c) (C) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.4 Oxidizer Temperature [326 IAC 2-2]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring operating temperature of each oxidizer in the control system used to control emissions from the sixteen (16) printing presses (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, **#37, #38, #39 and #40**). For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (15, **16, 17, 18, 19, 110, 111 and** through 112) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizer (113) is the combustion zone 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C -Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system used to control emissions from the sixteen (16) printing presses (presses #19,



#20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, **#37, #38, #39 and #40**) is below the corresponding temperature in the table below. A three (3) hour average operating temperature that is below the corresponding temperature in the table below is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-Hour Average Temperature (°F)
15, 16, 17, 19, 110, 111	550
18, 112	600
113	1600

- (b) The Permittee shall determine the three (3) hour average operating temperature of each oxidizer in the control system from the most recent valid performance test that demonstrates compliance with the limits in Condition D.2.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average operating temperature of any oxidizer in the control system is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.5 Oxidizer Grouping

- (a) Catalytic oxidizers 15, 16, 17, 18, 19, 110, 111, through 112 and regenerative thermal oxidizer 113 have been interconnected with a common press exhaust plenum to form an oxidization control system. As a control system, the captured VOC emissions from any operating press (presses #19 through #25 and #27 through #38) is **(presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40) are** exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).
  - (1) Presses #19, #20, #21, #22, #23, #24 and through #25 are each rated at 4250 cfm.
  - (2) Presses #27, #28, #29, #30, #31, #32, #33, #34 and through #35 are each rated at 6375 cfm.
  - (3) Press #36 is rated at 4000 cfm.
  - (4) Presses #37 and #38 are each rated at 7000 cfm.
  - (5) **Presses #39 and #40 are each rated at 10000 cfm.**
  - (6) Oxidizers 15, 16, 17 and through 18 are each rated at 8500 cfm,

- (7) Oxidizers I9, I10, I11 and through I12 are each rated at 12750 cfm.
- (8) Oxidizer I13 is rated at 55000 cfm.
- (b) To prevent an uncontrolled release of captured VOC emissions:
  - (a) (1) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.
  - (b) (2) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.
  - (c) (3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidization control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidization control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.
  - (d) (4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.
  - (e) (5) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).

**D.2.7 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following compliance assurance monitoring requirements for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, #37, #38, #39 and #40:

- (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.

	Indicator #1	Indicator #2	Indicator # 3
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 -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 satisfy 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.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated
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	Quarterly	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.

	Indicator #1	Indicator #2	Indicator # 3
E. Recordkeeping	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting inspection, 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	Quarterly	Annually.	Quarterly

(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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^\circ\text{F}$ .	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> <li>• External inspection - annually</li> <li>• Internal inspection - annually.</li> </ul>	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.
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.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 dates of catalyst sampling, initials of person conducting sampling, catalyst analysis 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	Quarterly	Annually.	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 of 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.

(c) Monitoring Approach For The Regenerative Thermal Oxidizer:

Indicator #1	Indicator #2	Indicator #3
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	Indicator #1	Indicator #2	Indicator #3
I. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction 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.
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.
III. Performance Criteria			
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone 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 the IDEM prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^{\circ}\text{F}$ .	Not applicable.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously	External Inspection - annually Internal inspection - annually.	Once every five years.
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.
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	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, including dates and initials of person conducting inspection, and of 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.

	Indicator #1	Indicator #2	Indicator #3
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.
Frequency	Quarterly.	Annually.	For each performance test conducted.

(1) Rationale for Selection of Performance Indicators

The oxidizer combustion zone temperature was selected because it is indicative of a regenerative thermal oxidizer's operation. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected. If the combustion zone temperature decreases significantly, complete combustion may not occur.

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 during the permit term to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) Rationale for Selection of Indicator Ranges

The selected indicator range for the oxidizer combustion zone temperature is established based upon demonstrated performance during a performance test.

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

D.2.8 Monitoring [326 IAC 2-2]

- (a) The Permittee shall conduct quarterly inspections of all components relating to the capture system of each of the sixteen (16) printing presses (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, #37, #38, #39 and #40). If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (15, 16, 17, 18, 19, 110, 111, and 112) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permitted shall take reasonable response steps in accordance with Section C - Response to Excursions or Accidences. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be



considered a deviation from this permit.

#### D.2.9 Record Keeping Requirements

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- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.4, and D.2.6, the Permittee shall maintain records in accordance with (1) and (2) below:
  - (1) Continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for catalytic oxidizers 15, 16, 17, 18, 19, 110, 111, through 112, and the combustion zone temperature for the regenerative thermal oxidizer 113 (reduced to a three-hour average basis) and the three (3) hour average inlet temperature to the catalyst bed and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant performance test.
  - (2) Daily records of the permanent total enclosure monitoring parameter value (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM, OAQ and VCAPC).
- (b) To document compliance with Condition D.2.8 the Permittee shall maintain records of inspections or sample. These records shall include as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions taken (if any are required).
- (c) All records shall be maintained in accordance with the Part 70 Section C - General Record Keeping Requirements.

SECTION D.3

FACILITY OPERATION CONDITIONS

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

- (33)(30) Flexographic printing press, identified as press #36, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (39)(38) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 5.
- (40)(39) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 6.
- (41)(40) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 7.
- (42)(41) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 8.
- (43)(42) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 9.
- (44)(43) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 10.
- (45)(44) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 11.
- (46)(45) 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 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 12.

~~(47)~~**(46)** Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38 #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40, and exhausting to stack 13.

(Note: Each individual oxidizer I5, I6, I7, I8, I9, I10, I11 and through I12 is only capable of handling air flow from two of the nineteen ~~(19)~~ presses (#19 through #25 and #27 through #38) at a time, and the RTO, I13, is capable of handling air flow from eight to twelve of the nineteen ~~(19)~~ presses (#19 through #25 and #27 through #38) at a time.)

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

#### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to SSM 167-18122-00033, issued on May 3, 2004, and revised through this Part 70 permit, the following conditions apply:

- (a) The annual VOC usage on press #36 shall be limited such that the potential to emit does not exceed 39.99 tons, considering the most recent determination of capture and destruction. Compliance with this limit shall be determined at the end of each month based on the previous 12 months. Compliance shall be documented using the following equation: (Printing VOC usage) \* (1 - overall control efficiency) + Cleanup VOC loss, 39.99 tons. Compliance with this condition shall make this press not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration (PSD).
- (b) Whenever press #36 is applying VOC containing materials, the press exhaust shall be vented through the operating oxidation control system. The press shall maintain a minimum overall control efficiency of 80.75% for VOC emissions.
- ~~(b)~~**(c)** Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

#### D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the VOC capture system on press #36, in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner to attain and maintain a minimum 60% overall control efficiency for flexographic printing.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and through I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

#### D.3.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

- (a) **Testing requirements for the destruction efficiency of the thermal and catalytic oxidizers are as follows:**
  - (1) Within sixty (60) days after the start up of the new regenerative thermal oxidizer (I13), the Permittee shall conduct a performance test to verify its VOC destruction efficiency as per Conditions D.3.1 and D.3.2.
  - (2) Testing of the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and through I12) to

verify their destruction efficiencies was performed on April 17, 2006.

- (3) The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.
- (b) The capture efficiency test performed on October 27, 2004 for press #36, shall be repeated whenever a reconfiguration or change in its design is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this press, which include any of the following:
  - (a) (1) The addition of a print station to the press,
  - (b) (2) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers), or
  - (c) (3) Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

- (a) Compliance with the VOC limitations contained in Conditions D.3.1 shall be determined by tracking all VOC usage (including but not limited to inks, solvents, additives, and clean-up solvents) by press #36. This data shall be compiled monthly and added to the previous 11 months to generate a 12-consecutive month total VOC fed to press #36.
- (b) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the oxidizer system (I5, I6, I7, I8, I9, I10, I11, I12 and through I13) to achieve compliance with conditions D.3.1 and D.3.2.

D.3.5 Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating temperature of each oxidizer in the control system used to control emissions from press #36. For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and through I12) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizer (I13) is the combustion zone 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C -Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system used to control emissions from press #36 is below the corresponding temperature in the table below. A three (3) hour average operating temperature that is below the corresponding temperature in the table below is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-Hour Average Temperature (°F)
I5, I6, I7, I9, I10, I11	550
I8, I12	600
I13	1600

- (b) The Permittee shall determine the three (3) hour average operating temperature of each oxidizer in the control system from the most recent valid performance test that demonstrates compliance with the VOC limit in Condition D.3.1, as approved by IDEM, OAQ and VCAPC.
- (c) On and after the date the approved performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average operating temperature of any oxidizer in the control system is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.3.6 Oxidizer Grouping

- (a) Catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, through I12 and regenerative thermal oxidizer I13 have been interconnected with a common press exhaust plenum to form an oxidation control system. As a control system, the captured VOC emissions from any operating press (presses #19 through #25 and #27 through #38) is (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39 and/or #40) are exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).
  - (1) Presses #19, #20, #21, #22, #23, #24 and through #25 are each rated at 4250 cfm.
  - (2) Presses #27, #28, #29, #30, #31, #32, #33, #34 and through #35 are each rated at 6375 cfm.
  - (3) Press #36 is rated at 4000 cfm.
  - (4) Presses #37 and #38 are each rated at 7000 cfm.
  - (5) **Presses #39 and #40 are each rated at 10000 cfm.**
  - (6) Oxidizers I5, I6, I7 and through I8 are each rated at 8500 cfm,
  - (7) Oxidizers I9, I10, I11 and through I12 are each rated at 12750 cfm.
  - (8) Oxidizer I13 is rated at 55000 cfm.
- (b) To prevent an uncontrolled release of captured VOC emissions:
  - (a) (1) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.
  - (b) (2) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.

- (e) (3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidization control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidization control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.
- (d) (4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.
- (e) (5) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).

#### D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, 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.3.1.
  - (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 from press #36 using methods identified in condition D.3.4.
- (b) To document compliance with Conditions D.3.1, D.3.2, D.3.4, D.3.5, and D.3.7, the Permittee shall maintain records in accordance with (1) and (2) below:
  - (1) Continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for catalytic oxidizers I5, I6, I7, I8, I9, I10, I11 and through I12, and the combustion zone temperature for the regenerative thermal oxidizer I13 (reduced to a three-hour average basis) and the three (3) hour average inlet temperature to the catalyst bed and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant

performance test.

- (2) Daily records of the monitoring parameter value (duct pressure, or fan amperage, or other parameter as approved by IDEM, OAQ and VCAPC).
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of each inspection or sample. These records shall include, as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions (if any are required).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

All of the emission units in Section D.4 have been removed from operation. Therefore, Section D.4 will be deleted in its entirety:

~~SECTION D.4 FACILITY OPERATION CONDITIONS~~

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

- ~~(32) Flexographic in-line portable printer attached to extruder #11, identified as E11, using no control, and primarily exhausting to stack 111.~~
- ~~(48) Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.~~
- ~~(49) Flexographic in-line portable printer attached to extruder #18, identified as E18, installed in 1986, using no control, and exhausting to stack 118.~~
- ~~(50) Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.~~

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

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

~~D.4.1 Volatile Organic Compounds [326 IAC 8-5-5]~~

- ~~(a) The annual VOC usage on In-Line Press E-11 shall not exceed 24.9 tons per 12 consecutive month period with compliance determined at the end of each month. Compliance with this condition shall make In-Line Press E-11 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).~~
- ~~(b) Pursuant to 326 IAC 8-5-5, In-Line Presses E17, E18, and E19, shall be controlled by a VOC control device with ninety percent (90%) reduction efficiency, and a capture system efficiency sufficient to achieve an overall control efficiency of sixty percent (60%).~~

~~Compliance Determination Requirements~~

~~D.4.2 Compliance Plan [326 IAC 8-5-5]~~

~~In-Line Presses, E-17, E-18, and E-19, are not in compliance with the requirements of 326 IAC 8-5-5 and Condition D.4.1(b). The Permittee shall comply with the following Compliance Plan:~~

- ~~(a) Shutdown and dismantle the three (3) In-Line Presses, E-17, E-18, and E-19 by December 31, 2006.~~
- ~~(b) The Permittee shall notify IDEM, OAQ on the compliance status of these in-line presses by January 10, 2007.~~

~~D.4.3 Volatile Organic Compounds (VOC)~~

~~Compliance with the VOC limitations contained in Conditions D.4.1(a) shall be determined by tracking all VOC usage (including but not limited to inks, solvents, additives, and clean-up solvents) for press E11. This data shall be compiled monthly and added to the previous 11 months to generate a 12-consecutive month total VOC fed to this press.~~



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

D.4.4 Record Keeping Requirements

~~(a) To document compliance with Condition D.4.1(a), 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 limit and/or the VOC emission limit established in Condition D.4.1(a).~~

~~(1) The VOC content of each coating material and solvent used.~~

~~(2) The amount of coating material and solvent, used for press E-11 monthly.~~

~~(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 using methods identified in condition D.4.3.~~

~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

D.4.5 Reporting Requirements

~~A monthly summary of the information to document compliance with Condition D.4.1(a) shall be submitted quarterly 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 quarterly report form associated with the former Condition D.4.5 has been deleted from the permit:

**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: PO Box 905, Terre Haute, Indiana 47808  
Part 70 Permit No.: T167-6182-00033  
Facility: In-line Press E11  
Parameter: VOC usage from E11  
Limit: E11 not to exceed 24.9 tons per 12 consecutive month period  
Compliance from all limits with the limit shall be determined at the end of each month

\_\_\_\_\_ QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	E11-VOC Usage This Month (tons)	E11-VOC Usage for Past 11 Months (tons)	E11-VOC Usage for 12 Month Period (tons)
1			
2			
3			

- No deviation occurred in this quarter.  
 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.

SECTION D.5

FACILITY OPERATION CONDITIONS

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

- (8) (6) Flexographic printing press, identified as press #11, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (9) (7) Flexographic printing press, identified as press #12, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (10) (8) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (14) (9) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (12)(10) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (13)(11) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (14)(12) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (15)(13) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (38)(37) Four (4) Catalytic Oxidizers identified as I1, I2, I3 and through I4 and exhausting **respectively** through Stacks S1, S2, S3 and through S4, each with a maximum heat input capacity of 3.0 million BTU British-thermal-units per hour **for the supplemental fuel**, (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17 and/or through #18.

(Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)

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

D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

- (a) Pursuant to 326 IAC 8-5-5(e)(3), the capture system for flexographic printer identified as presses #11, #12, #13, #14, #15, #16, #17 and through #18 in combination with the catalytic oxidation system 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), the four (4) catalytic oxidizers (I1, I2, I3 and through I4) shall maintain a minimum destruction efficiency of 90%.

D.5.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

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- (a) **Testing requirements for the destruction efficiency of the catalytic oxidizers are as follows:**
- (1) Testing of the catalytic oxidizers (I1, I2, I3 and through I4) to verify their destruction efficiencies was performed on June 27, 2005.
  - (2) The oxidizers' destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.
- (b) **Testing requirements for the capture efficiency of the flexographic presses are as follows:**
- (1) Within sixty (60) days after the issuance of permit SPM 167-21257-00033, the Permittee shall conduct a performance test to verify the system capture efficiencies of the six (6) printing presses (presses #13, #14, #15, #16, #17, and #18) as per Conditions D.5.1 and D.5.2 utilizing methods as approved by the Commissioner. Testing of presses #11 and #12 to verify their system captures efficiencies was performed on June 27, 2005.
  - (2) The capture efficiency test shall be repeated **for a press in this section** whenever a reconfiguration or change in the design of ~~the presses in this section~~ **that press** is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:
    - (a) **(A)** The addition of print station to a press,
    - (b) **(B)** Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers),  
or
    - (c) **(C)** Changing the static duct pressure.
- (c) Testing shall be conducted in accordance with Section C - Performance Testing.

**SECTION D.6 FACILITY OPERATION CONDITIONS**

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

- (34) Flexographic printing press, identified as press #37, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13;
- (35) Flexographic printing press, identified as press #38, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (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.
- (47) Regenerative Thermal Oxidizer, identified as I13, with a maximum air flow rate of 55,000 CFM, and a maximum heat input rating of 8.6 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 13.

(Note: Each individual oxidizer I5 through I12 is only capable of handling air flow from two of the nineteen (19) presses (#19 through #25 and #27 through #38) at a time, and the RTO, I13, is capable of handling air flow from Eight to twelve of the nineteen (19) presses (#19 through #25 and #27 through #38) at a time.

(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 2-2]**

- (a) Pursuant to SSM 167-21605-00033, issued on January 5, 2006, and revised through this Part 70 permit, the annual VOC usage on press #37 and press #38 combined shall be limited such that the potential to emit does not exceed 39.99 tons, considering the most recent determination of capture and destruction. Compliance with this limit shall be determined at the end of each month based on the previous 12 months. Compliance shall be documented using the following equation:  $(\text{Printing VOC usage}) * (1 - \text{overall control efficiency}) + \text{Cleanup VOC loss} \# 39.99 \text{ tons}$ . Compliance with this condition shall make these two presses not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration
- (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 to achieve 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 condition shall make 326 IAC 2-2 (PSD) not applicable.

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

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- ~~(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 combination with the catalytic/regenerative thermal oxidation system 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(e)(3)(B), the catalytic oxidizers (I5 through I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.~~

**Compliance Determination Requirements**

~~D.6.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]~~

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~~Within sixty (60) days after the start up of the new regenerative thermal oxidizer (I13), the Permittee shall conduct a performance test to verify its VOC destruction efficiency as per Conditions D.6.1 and D.6.2. Testing of the catalytic oxidizers (I5 through I12) to verify their destruction efficiencies was performed on April 17, 2006. The destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.~~

~~The capture efficiency test performed on April 17, 2006 for presses #37 and #38 shall be repeated whenever a reconfiguration or change in the design of the presses in this section is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:~~

- ~~(a) The addition of a print station to a press,~~
- ~~(b) Increasing or decreasing the volumetric flow rate from the dryer (e.g. by changing the size of press fans/motors or removal or derating of dryers), or~~
- ~~(c) Changing the static duct pressure.~~

~~Testing shall be conducted in accordance with Section C – Performance Testing.~~

~~D.6.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]~~

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- ~~(a) Compliance with the VOC limitations contained in Conditions D.6.1 shall be determined by tracking all VOC usage (including but not limited to inks, solvents, additives, and clean-up solvents) by press. This data shall be compiled monthly and added to the previous 11 months to generate a 12 consecutive month total VOC fed to each press.~~
- ~~(b) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the oxidizer system (I5 through I13) to achieve compliance with conditions D.6.1 and D.6.2.~~

#### D.6.5 Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating temperature of each 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 operating temperature for the catalytic oxidizers (I5 through I12) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizer (I13) is the combustion zone 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C—Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system used to control emissions from press #37 and press #38 is below the corresponding temperature in the table below. A three (3) hour average operating temperature that is below the respective value is not a deviation from this permit. Failure to take response steps in accordance with Section C—Response to Excursions or Exceedances shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-hour Average Temperature (°F)
I5, I6, I7, I9, I10, I11	550
I8, I12	600
I13	1600

- (b) The Permittee shall determine the three (3) hour average operating temperature of each oxidizer in the control system 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 performance test results are available, the Permittee shall take appropriate response steps in accordance with Section C—Response to Excursions or Exceedances whenever the 3-hour average operating temperature of any oxidizer in the control system is below the three (3) hour average operating temperature as observed during the most recent, approved, compliant performance test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the most recent, approved, compliant performance test is not a deviation from this permit. Failure to take response steps in accordance with Section C—Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.6.6 Oxidizer Grouping

Catalytic oxidizers I5 through I12 and regenerative thermal oxidizer I13 have been interconnected with a common press exhaust plenum to form an oxidization control system. As a control system, the captured VOC emissions from any operating press (presses #19 through #25 and #27 through #38) is exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).

Presses #19 through #25 are each rated at 4250 cfm. Presses #27 through #35 are each rated at 6375 cfm. Press #36 is rated at 4000 cfm. Presses #37 and #38 are each rated at 7000 cfm. Oxidizers I5 through I8 are each rated at 8500 cfm, Oxidizers I9 through I12 are each rated at 12750 cfm. Oxidizer I13 is rated at 55000 cfm.

To prevent an uncontrolled release of captured VOC emissions:



- (a) ~~Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.~~
- (b) ~~The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.~~
- (c) ~~In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidation control system and the press exhaust flow handled by that oxidizer diverted to the other operating oxidizer(s) in the control system. If the oxidation control system no longer has capacity to handle the exhaust flow from the operating presses, presses are to be shut down until the total press exhaust flow is less than or equal to the operating oxidation system capacity. Any press shut down in response to an oxidizer failure can be restarted as soon as additional oxidation capacity is brought online or other presses are shutdown.~~
- (d) ~~In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press shall be immediately shut down.~~
- (e) ~~A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and, if facility intervention is required, a description of the corrective action(s).~~

#### D.6.7 Parametric Monitoring

- (a) ~~The Permittee shall establish the appropriate monitoring parameter for presses #37 and #38 (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM) from the most recent performance test that demonstrates compliance with the limits in Conditions D.6.1 and D.6.2.~~
- (b) ~~The Permittee shall maintain one of the following permanent total enclosure monitoring parameter values for each press for each day the press is operating as an indication that 100 percent capture is being attained:~~
  - (1) ~~Duct pressure or fan amperage—The Permittee shall maintain the flow indicator parameter at a value at least 85 percent of the value as established during the most recent performance test, or~~
  - (2) ~~Differential pressure—The Permittee shall maintain a differential pressure at a value of 0.007 inches of water column or less, or~~
  - (3) ~~Differential pressure—The Permittee shall maintain a differential pressure at or less than a value demonstrated during the most recent performance test as being sufficient to meet the 200 feet/min face velocity at all NDOs.~~
- (c) ~~The established permanent total enclosure monitoring parameter value shall be observed at least once per day for each day the press is operating.~~

**D.6.8 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]**

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following compliance assurance monitoring requirements for presses #37 and #38:

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

	Indicator #1	Indicator #2	Indicator # 3
<b>I. Indicator</b>	<b>Work Practice</b>	<b>Work Practice</b>	<b>Pressure differential</b>
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
<b>II. Indicator Range</b>	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 satisfy the permanent total enclosure with Method 204 criteria.  Alternatively, a three hour average value can be used as the indicator range.
<b>Corrective Action</b>	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.
<b>III. Performance Criteria</b>			
<b>A. Data Representativeness</b>	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>B. Verification of Operational Status</b>	Inspection records.	Inspection records.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated.

	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	Quarterly	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, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections, including dates and initials of person conducting 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	Quarterly	Annually.	Quarterly

(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. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^\circ\text{F}$ .	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	<ul style="list-style-type: none"> <li>* External inspection - annually</li> <li>* Internal inspection - annually.</li> </ul>	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 dates of catalyst sampling, initials of person conducting sampling, 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	Quarterly	Annually.	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.

(c) — Monitoring Approach For The Regenerative Thermal Oxidizer:

	Indicator #1	Indicator #2	Indicator #3
I. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction 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.
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.
III. Performance Criteria			
A. Data — Representativeness	Any temperature monitoring device employed to measure the oxidizer combustion zone 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 the IDEM prior to conducting the performance test.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria $\pm 20^{\circ}\text{F}$ .	Not applicable.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously	• External inspection — annually. • Internal inspection — annually.	Once every five years.
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.
Averaging Period	Not applicable if using any measured value as indicator; Three hours if using 3-hour average as indicator.	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, including dates and initials of person conducting inspection, and of 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.

	Indicator #1	Indicator #2	Indicator #3
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.
Frequency	Quarterly	Annually.	For each performance test conducted.

(1) — Rationale for Selection of Performance Indicators

The oxidizer combustion zone temperature was selected because it is indicative of a regenerative thermal oxidizer's operation. By maintaining the temperature at or above a minimum level, a predetermined control efficiency can be expected. If the combustion zone temperature decreases significantly, complete combustion may not occur.

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 during the permit term to demonstrate compliance with permit conditions (i.e., percent destruction efficiency).

(2) — Rationale for Selection of Indicator Ranges

The selected indicator range for the oxidizer combustion zone temperature is established based upon demonstrated performance during a performance test.

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

D.6.9 — Monitoring

- (a) — The Permittee shall conduct quarterly inspections of all components relating to the capture system of each of the two (2) Presses #37 and #38. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C — Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C — Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) — The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (15, 16, 17, 18, 19, 110, 111, 112) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C — Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C — Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

### **D.6.10 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 from Presses #37 and #38 using methods identified in Condition D.6.4.~~
- (b) ~~To document compliance with Conditions D.6.1, D.6.2, D.6.4 and D.6.7, the Permittee shall maintain records in accordance with (1) and (2) below:~~
- ~~(1) Continuous inlet temperature to the catalyst bed (reduced to a three-hour average basis) for catalytic oxidizers I5 through I12, and the combustion zone temperature for the regenerative thermal oxidizer I13 (reduced to a three-hour average basis) and the three (3) hour average inlet temperature to the catalyst bed and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant performance test.~~
- ~~(2) Daily records of the permanent total enclosure monitoring parameter value (duct pressure, or fan amperage or differential pressure, or other parameter as approved by IDEM, OAQ and VCAPC).~~
- (c) ~~To document compliance with Condition D.6.9, the Permittee shall maintain records of each inspection or sample. These records shall include, as a minimum, dates, initials of the person performing the inspection or taking the sample, results, and corrective actions (if any are required).~~
- (d) ~~All records shall be maintained in accordance with the Part 70 Section C—General Record Keeping Requirements.~~

### **D.6.11 Reporting Requirements**

~~A monthly 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 quarterly report form associated with the former Condition D.6.11 has been deleted from the permit:

**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: 350 North Fruitridge Ave., Terre Haute, Indiana 47804  
Mailing Address: PO Box 905, Terre Haute, Indiana 47808  
Part 70 Permit No.: T167-6182-00033  
Facility: Press #37 and Press #38  
Parameter: VOC emission  
Limit: Combined emissions not to exceed 39.99 tons per 12 consecutive month period with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Press #37 and Press #38 Combined		
	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total
1			
2			
3			

No deviation occurred in this quarter.

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.

Sections D.7 and D.8 have been renumbered as Sections D.4 and D.6, respectively. Also, the facility description in the former Section D.7 is amended as follows:

~~SECTION D.7~~ **D.4**

**FACILITY OPERATION CONDITIONS**

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

~~(36)~~**(35)** Closed Solvent Spray **solvent spray** type parts washer exhausting to stack 20.

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

**Conclusion and Recommendation**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 167-23761-00033 and Significant Permit Modification No. 167-23850-00033. The staff recommend to the Commissioner that this Part 70 Significant Source Modification and Significant Permit Modification be approved.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Company Name:** Bemis Company, Inc.  
**Address City IN Zip:** 1350 North Fruitridge Avenue, Terre Haute IN 47804-4218  
**ID:** 167-23761-00033 and 167-23850-00033  
**Reviewer:** Allen R. Davidson  
**Date:** 11/9/2006

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

4.778

41.85528

	Pollutant					
	PM*	PM <sub>10</sub> *	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.04	0.16	0.01	2.09	0.12	1.76

\*PM emission factor is filterable PM only. PM<sub>10</sub> emission factor is condensable and filterable PM<sub>10</sub> combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**HAPs - Organics**

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.0021	0.0012	0.075	1.8	0.0034
Potential Emission in tons/yr	0.000	0.000	0.002	0.038	0.000

**HAPs - Metals**

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	0.0005	0.0011	0.0014	0.00038	0.0021
Potential Emission in tons/yr	0.000	0.000	0.000	0.000	0.000

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu  
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98).

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Emissions Calculations  
VOC From Printing Press Operations**

**Company Name:** Bemis Company, Inc.  
**Address City IN Zip:** 1350 North Fruitridge Avenue, Terre Haute IN 47804-4218  
**Permit Number:** 167-23761-00033 and 167-23850-00033  
**Reviewer:** Allen R. Davidson  
**Date:** 11/9/2006

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin2/year	Control Efficiency
37	Confidential	Confidential	Confidential	95.0%

Ink Name	Maxium Coverage (lbs/MMin2)	Weight % Organics*	Flash Off %	Throughput (MMin2/year)	Emissions Before Control (tons/year)	Emissions After Control (tons/year)
Color Ink	Confidential	Confidential	98%	Confidential	895.13	44.76
White Ink	Confidential	Confidential	98%	Confidential	497.71	24.89
Cleanup Solvent Usage	Confidential	Confidential	100%	Confidential	15.26	0.76
Total VOC Emissions = Worst-Case Ink + Cleanup Solvent Usage =					910.39	45.52

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin2/year	Control Efficiency
38	Confidential	Confidential	Confidential	95.0%

Ink Name	Maxium Coverage (lbs/MMin2)	Weight % Organics*	Flash Off %	Throughput (MMin2/year)	Emissions Before Control (tons/year)	Emissions After Control (tons/year)
Color Ink	Confidential	Confidential	98%	Confidential	895.13	44.76
White Ink	Confidential	Confidential	98%	Confidential	497.71	24.89
Cleanup Solvent Usage	Confidential	Confidential	100%	Confidential	15.26	0.76
Total VOC Emissions = Worst-Case Ink + Cleanup Solvent Usage =					910.39	45.52

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin2/year	Control Efficiency
39	Confidential	Confidential	Confidential	95.0%

Ink Name	Maxium Coverage (lbs/MMin2)	Weight % Organics*	Flash Off %	Throughput (MMin2/year)	Emissions Before Control (tons/year)	Emissions After Control (tons/year)
Color Ink	Confidential	Confidential	98%	Confidential	1377.13	68.86
White Ink	Confidential	Confidential	98%	Confidential	765.71	38.29
Cleanup Solvent Usage	Confidential	Confidential	100%	Confidential	15.26	0.76
Total VOC Emissions = Worst-Case Ink + Cleanup Solvent Usage =					1392.39	69.62

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin2/year	Control Efficiency
40	Confidential	Confidential	Confidential	95.0%

Ink Name	Maxium Coverage (lbs/MMin2)	Weight % Organics*	Flash Off %	Throughput (MMin2/year)	Emissions Before Control (tons/year)	Emissions After Control (tons/year)
Color Ink	Confidential	Confidential	98%	Confidential	1377.13	68.86
White Ink	Confidential	Confidential	98%	Confidential	765.71	38.29
Cleanup Solvent Usage	Confidential	Confidential	100%	Confidential	15.26	0.76
Total VOC Emissions = Worst-Case Ink + Cleanup Solvent Usage =					1392.39	69.62

Total VOC Emissions From All Presses = 4605.55    230.28

\*VOC (Tons/year) = Maximum Coverage lbs per MMin<sup>2</sup> \* Weight % organics (weight % of water & organics - weight % of water = weight % organics) \* Flash off \* Throughput / 2000 lbs per ton

**METHODOLOGY**

Throughput = Maximum line speed feet per minute \* Convert feet to inches \* Maximum print width inches \* 60 minutes per hour \* 8760 hours per year = MMin<sup>2</sup> per Year

VOC = Maximum Coverage pounds per MMin<sup>2</sup> \* Weight percentage organics (volatiles minus water) \* Flash off \* Throughput \* Tons per 2000 pounds = Tons per Year

Calculations assume a 98% flash off rate for flexographic printing according to EPA Document AP-42, Chapter 4.9 "General Graphic Printing."

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

**Appendix B  
Best Available Control Technology (BACT) Determination**

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

**Source Description and Location**

<b>Source Name:</b>	<b>Bemis Company, Inc.</b>
<b>Source Location:</b>	<b>1350 North Fruitridge Avenue Terre Haute, IN 47804-4218</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>2673, 3081, 3079</b>
<b>Operation Permit No.:</b>	<b>167-6182-00033</b>
<b>Operation Permit Issuance Date:</b>	<b>June 28, 2004</b>
<b>Source Modification No.:</b>	<b>167-23761-00033</b>
<b>Permit Modification No.:</b>	<b>167-23850-00033</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

**Background and Description of Proposed Modification**

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following federal BACT (Best Available Control Technology) review for a major modification relating to the operation of a polyethylene packaging manufacturing plant located at 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Bemis Company, Inc. to add two (2) new flexographic printing presses to the plant and to permit two (2) existing presses under the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2.

**New Emission Units and Pollution Control Equipment**

The application includes information relating to the prior approval for the construction and operation of the following equipment:

- (a) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

**Existing Emission Units and Pollution Control Equipment**

The application includes information relating to the prior approval for the operation of the following equipment:

- (a) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

### BACT Description

BACT is defined as "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under the Clean Air Act emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 111 or 112 of this Act."

According to the "Top-Down Best Available Control Technology Guidance Document" outlined in the 1990 draft U.S. EPA New Source Review Workshop Manual, BACT analyses are conducted with a "top-down" approach which consists of the following steps:

- (1) Identify all potentially available control options;
- (2) Eliminate technically infeasible control options;
- (3) Rank remaining control technologies by control effectiveness;
- (4) Evaluate control options; and
- (5) Select BACT.

Also in accordance with the "Top-Down Best Available Control Technology Guidance Document" outlined in the 1990 draft USEPA New Source Review Workshop Manual, BACT analyses (specifically step 4) must take into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution, thereby protecting public health and the environment. This BACT determination can be based upon, but not limited to, the following information:

- (1) The EPA RACT/BACT/LAER (RBLC) Clearinghouse;
- (2) U.S. EPA and State air quality permits;
- (3) Communications with control device equipment manufacturers;
- (4) The EPA New Source Review website;
- (5) Technical books and articles; and
- (6) Guidance documents from, and communications with, state agencies.

### Best Available Control Technology (BACT) Review Requirements

Pursuant to 326 IAC 2-2-3, a major modification shall apply best available control technology (BACT) for each regulated pollutant for which the modification would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase of the pollutant would occur as a result of a physical change or change in the method of operation in the unit. The affected emission units are Presses #37, #38, #39 and #40, which shall apply BACT for volatile organic compounds (VOC).

#### Step 1: Identify Potentially Available Control Options

The BACT analysis submitted by Bemis Company, Inc. was verified by IDEM, OAQ, through the review of the various control technologies listed in the USEPA BACT/RACT/LAER Clearinghouse. See the comparison table on Page 5 for a summary of the VOC BACT determinations for emission sources with flexographic printing operations:

- (1) Pursuant to Significant Source Modification 167-20981-00033, issued on September 18, 2006, which subjected existing flexographic printing presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34 and #35 to review under the Prevention of Significant Deterioration (PSD) rules, BACT was determined to be the use of a permanent total enclosure and an oxidation system with a rated 95% overall control efficiency. This BACT determination is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.
- (2) Three (3) presses at a Banner Packaging facility in Wisconsin each have a requirement for a permanent total enclosure and an oxidation system rated at 95% overall control efficiency. These presses are part of a total of eleven (11) presses which have the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.  
  
Bemis Company, Inc. is proposing the use of a permanent total enclosure and an oxidation system with a rated 95% overall control efficiency, which is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.
- (3) One (1) press at a C-P Converters facility in Pennsylvania has a requirement for a permanent total enclosure and a catalytic oxidation system rated at 95% overall control efficiency. This press is part of a total of eleven (11) presses which have the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.  
  
Bemis Company, Inc. is proposing the use of a permanent total enclosure and an oxidation system with a rated 95% overall control efficiency, which is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.
- (4) Five (5) presses at a Pechiney Plastic Packaging, Inc. facility in Wisconsin each have a requirement for a permanent total enclosure and an oxidation system rated at 95% overall control efficiency. These presses are part of a total of eleven (11) presses which have the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

Bemis Company, Inc. is proposing the use of a permanent total enclosure and an oxidation system with a rated 95% overall control efficiency, which is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

- (5) One (1) press at a Curwood, Inc. facility in Wisconsin has a requirement for a permanent total enclosure and a catalytic oxidation system rated at 95% overall control efficiency. This press is part of a total of eleven (11) presses which have the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

Bemis Company, Inc. is proposing the use of a total enclosure and an oxidation system with a rated 95% overall control efficiency, which is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

- (6) An older press at a Curwood, Inc. facility in Wisconsin does not have a total enclosure and has a requirement for a thermal or catalytic oxidation system rated at 82% overall control efficiency. This BACT determination is less stringent than the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse, and is also less stringent than the BACT that Bemis Company, Inc. is proposing.
- (7) One (1) press at a Milprint, Inc. facility in Wisconsin has a requirement for a total enclosure and a catalytic oxidation system rated at 95% overall control efficiency. This press is part of a total of eleven (11) presses which have the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

Bemis Company, Inc. is proposing the use of a permanent total enclosure and an oxidation system with a rated 95% overall control efficiency, which is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

- (8) An older press at a Milprint, Inc. facility in Wisconsin does not have a permanent total enclosure and has a requirement for a catalytic oxidation system rated at 82% overall control efficiency. This BACT determination is less stringent than the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse, and is also less stringent than the BACT that Bemis Company, Inc. is proposing.
- (c) OAQ has issued permits for rotogravure printing presses which control VOC emissions using thermal oxidation systems with 98% destruction efficiency and 100% capture efficiency. However, this destruction efficiency cannot be continuously achieved for flexographic printing presses due to the extreme variability of the VOC air stream. Therefore, the comparison of control options in this BACT analysis is limited to similar flexographic printing presses.



**Summary of BACT Determinations for Flexographic Printing Operations  
 Comparable to Bemis Company Inc. Presses #37, #38, #39 and #40  
 (arranged most recent permit date first)**

Permit Date	State	RBLC ID	Source	Affected Facility	BACT Determination
pending (2007)	IN		Bemis Company, Inc.	Four (4) Flexographic Printing Presses	Permanent total enclosure. Catalytic and/or thermal oxidation system. 95% overall control efficiency.
09/06	IN		Bemis Company, Inc.	Twenty-Two (22) Flexographic Printing Presses	Permanent total enclosure. Catalytic and/or thermal oxidation system. 95% overall control efficiency.
07/06	WI	WI-0242	Banner Packaging (Division of Bemis Company, Inc.)	Flexographic Press.	Permanent total enclosure. Oxidation system (type not listed). 95% overall control efficiency.
08/04	WI	WI-0213	Banner Packaging (Division of Bemis Company, Inc.)	Flexographic Printing Press.	Permanent total enclosure. Catalytic oxidation system. 95% overall control efficiency.
01/03	PA	PA-0206	C-P Converters	Flexographic Printer.	Permanent total enclosure. Catalytic oxidation system. 95% overall control efficiency.
09/02	WI	WI-0217	Banner Packaging (Division of Bemis Company, Inc.)	Flexographic Printing Press.	Permanent total enclosure. Catalytic oxidation system. 95% overall control efficiency.
09/02	WI	WI-0193	Pechiney Plastic Packaging, Inc.	Five (5) Flexographic Printing Presses.	Permanent total enclosures. Oxidation system (either catalytic or thermal allowed). 95% overall control efficiency.
06/02	WI	WI-0189	Curwood, Inc.	Flexographic Printing Press.	Total enclosure. Catalytic oxidation system. 95% overall control efficiency.
06/99	WI	WI-0111	Milprint, Inc.	Flexographic Press.	Total enclosure. Catalytic oxidation system. 95% overall control efficiency.
02/98	WI	WI-0112	Milprint, Inc.	Flexographic Press.	Catalytic oxidation system 82% overall control efficiency
08/97	WI	WI-0171	Curwood, Inc.	Flexographic Printing Press.	Oxidation system (type not listed). 82% overall control efficiency

Step 2: Eliminate Technologically Infeasible Control Options

The U.S. EPA's Emission Inventory Improvement Program (EIIP) Technical Report Series, Volume III, Chapter 7 "Graphic Arts" (11/18/96), identifies three (3) technologically feasible options to reduce VOC emissions from flexographic printing: a thermal oxidizer, a catalytic oxidizer, or activated carbon adsorption. Therefore, OAQ has determined that all three of these options are technologically feasible for Bemis Company, Inc.

### Step 3: Rank Remaining Control Options by Control Effectiveness

- (1) Historical destruction efficiency tests performed on thirty-seven (37) of the catalytic and regenerative thermal oxidizers controlling Bemis Company's flexographic printing presses showed that the variability of the VOC in the air stream resulted in destruction efficiency levels ranging from 91.8% to 99.9%. The midpoint of this range is 95.85%:

$$\text{midpoint of range} = (91.8 + 99.9) / 2 = 95.85$$

To ensure compliance in a continuous manner, an overall control efficiency requirement greater than 95% would not be technologically feasible for presses #37, #38, #39, and #40. This is the PSD BACT determination already established for presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34 and #35. (See the Technical Support Document for Significant Source Modification 167-20981-00033, issued on September 18, 2006, for more details.) This BACT determination is comparable with the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse.

- (2) The use of activated carbon adsorption was found to be technologically feasible, but less stringent than the most stringent BACT found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse. Activated carbon adsorption systems can only be expected to provide 90% overall control efficiency.

### Step 4: Evaluate Control Options

Bemis Company's existing and total enclosures and oxidation system (eight (8) thermal oxidizers and one (1) regenerative thermal oxidizer), rated at 100% capture efficiency and 95% destruction efficiency, satisfy the most stringent BACT determination that is technologically feasible for flexographic printing operations. Therefore, no cost analysis is necessary.

### Step 5: Select BACT

The PSD BACT determination for presses #37, #38, #39, and #40 will be consistent with the PSD BACT determination in Significant Source Modification 167-19667-00033, issued to Bemis Company, Inc. on May 2, 2005, and Significant Source Modification 167-20981-00033, issued to Bemis Company, Inc. on September 18, 2006. Therefore, the requirements for the PSD BACT determination for Presses #37, #38, #39, and #40 are as follows:

- (1) Whenever any of presses #37, #38, #39 or #40 is applying VOC containing materials, the exhaust from that press shall be vented through the operating oxidation control system. Other existing presses exhausting to the same oxidation control system are presses #19, #20, #21, #22, #23, #24, #25, #27 #28, #29 #30, #31, #32, #33, #34, #35 and #36. Each press shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%.
- (2) Performance testing shall be required to verify VOC control efficiency of the oxidizers.
- (3) Continuous monitoring shall be required of the temperature at the inlet to the catalyst bed of the catalytic oxidizers.

- (4) Recordkeeping shall be required of the following:
  - (A) The continuous temperature at the inlet to the catalyst bed (on a three-hour average basis) for the catalytic oxidizers;
  - (B) The three-hour average temperature at the inlet to the catalyst bed used to demonstrate compliance during the most recent compliant performance test; and
  - (C) Daily records of the duct pressure, fan amperage, or differential pressure, or other parameter as approved by IDEM.
  
- (5) The capture efficiency system for presses #37, #38, #39 and #40 shall be considered one-hundred (100) percent efficient if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:
  - (A) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.
  - (B) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.
  - (C) The total area of all NDOs shall not exceed five percent (5%) of the surface area of the enclosure's four walls, floor, and ceiling.
  - (D) The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDOs shall be into the enclosure.
  - (E) All access doors and windows whose areas are not included in (C) and are not included in the calculation in (D) shall be closed during routine operation of the process.
  - (F) All VOC in the enclosure emissions must be captured and contained for discharge through its respective control system.

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

**Appendix C  
Air Quality Impact Analysis**

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

**Source Description and Location**

<b>Source Name:</b>	<b>Bemis Company, Inc.</b>
<b>Source Location:</b>	<b>1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218</b>
<b>County:</b>	<b>Vigo</b>
<b>SIC Code:</b>	<b>2673, 3081, 3079</b>
<b>Operating Permit No.:</b>	<b>167-6182-00033</b>
<b>Operating Permit Issuance Date:</b>	<b>June 28, 2004</b>
<b>Source Modification No.:</b>	<b>167-23761-00033</b>
<b>Permit Modification No.:</b>	<b>167-23850-00033</b>
<b>Permit Reviewer:</b>	<b>Allen R. Davidson</b>

**Proposed Project**

On October 11, 2006, Bemis Company, Inc. submitted a PSD application relating to the operation of a polyethylene packaging manufacturing plant located at 1350 North Fruitridge Avenue, Terre Haute, IN 47804-4218. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Bemis Company, Inc. to add two (2) new flexographic printing presses to the plant and to permit two (2) existing presses under the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2.

The application includes information relating to the prior approval for the construction and operation of the following new equipment:

- (a) Flexographic printing press, identified as press #39, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #40, permitted to construct in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

The application includes information relating to the prior approval for the operation of the following existing equipment:

- (a) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (b) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.

The primary emissions expected from this modification are volatile organic compounds (VOC). These emissions result from the printing of solvent based inks on plastic film. VOC emissions from these processes are to be controlled by means of the existing oxidization system. This oxidization system is comprised of one regenerative thermal oxidizer and eight catalytic oxidizers.

This appendix provides the air quality analysis (AQA) review of the permit application.

## Analysis Summary

Based on the potential emissions after controls, a PSD air quality analysis was triggered for VOCs. VOC emissions are a precursor in the formation of ozone. Ozone can adversely affect health by causing or aggravating breathing problems and adversely affects the growth of plant life. Currently, Vigo County and all surrounding counties are in attainment with the National Ambient Air Quality Standard (NAAQS) for ozone. This project is not expected to cause any significant impact upon maintaining the 8-hour ozone standard. Also, the project is not expected to have significant impact on economic growth, soils, vegetation, or visibility.

## Air Quality Impact Objectives

The purpose of the air quality impact analysis in the permit application is to accomplish the following objectives. Each objective is individually addressed in this document in each section outlined below:

- (a) Establish which pollutants require an air quality analysis based on PSD significant emission rates.
- (b) Provide analyses of actual stack heights with respect to Good Engineering Practice (GEP), the meteorological data used, a description of the model used in the analysis, and the receptor grid utilized for the analysis.
- (c) Determine the significant impact level, the area impacted by the source's emissions and background air quality levels.
- (d) Perform an ozone assessment if needed based on VOCs and NO<sub>x</sub> emissions.
- (e) Perform a qualitative analysis of the sources impact on general growth, soils, vegetation and visibility in the impact area with emphasis on any Class I areas.
- (f) Perform a Hazardous Air Pollutant (HAP) screening for informational purposes.
- (g) Summarize the Air Quality Analysis.

## Section A - Pollutants Analyzed for Air Quality Impact

### Applicability

The PSD requirements, 326 IAC 2-2, apply in attainment and unclassifiable areas and require an air quality impact analysis of each regulated pollutant emitted in significant amounts by a major stationary source or modification. Significant emission levels for each pollutant are defined in 326 IAC 2-2-1 and in the Code of Federal Register (CFR) 52.21(b)(23)(i).

### Projected Emissions

VOC, PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>x</sub> and CO are the pollutants that will be emitted as a result of this project and are summarized below in Table 1. An air quality analysis is required for VOC because potential emissions after controls exceeds the significant emission rate as shown in Table 1.

**TABLE 1**  
**Significant Emission Rates for PSD**

POLLUTANT	POTENTIAL EMISSION RATE (tons/year)	SIGNIFICANT EMISSION RATE (tons/year)	PRELIMINARY AQ ANALYSIS REQUIRED
VOC	230.4	40	Yes
PM <sub>10</sub>	0.2	15	No
NO <sub>x</sub>	2.1	40	No
SO <sub>x</sub>	0.0	40	No
CO	1.8	100	No

The emission rates on this table appear on Page 5 of the Technical Support Document.

**Section B - Stack Heights, Meteorological Data, Model Used, Receptor Grid**

VOCs are contributors to the formation of ozone because they are photochemically reactive. Currently, U.S. EPA has no regulatory photochemical models which can take into account small spatial scales or single source PSD modeling for ozone. The Comprehensive Air Quality Model with extensions (CAMx) model, accepted by the U.S. EPA, was the photochemical model used. Photochemical models like CAMx are used in regulatory or policy assessments to simulate the impacts from all sources by estimating pollutant concentrations and deposition of both inert and chemically reactive pollutants over large spatial scales. Details about stack heights, meteorological data and the receptor grid were not necessary for CAMx.

**Section C - Significant Impact Level/Area (SIA) and Background Air Quality Levels**

OAQ's Technical Support and Modeling Section has not established a significant impact level for ozone. Instead, maximum modeled concentrations were compared directly to the National Ambient Air Quality Standard (NAAQS) for the 8-hour ozone standard:

**TABLE 2**  
**Significant Impact Analysis**

POLLUTANT	TIME AVERAGING PERIOD	MAX. MODELED IMPACTS (ug/m <sup>3</sup> )	NAAQS (ug/m <sup>3</sup> )	REFINED AQ ANALYSIS REQUIRED
O <sub>3</sub>	8-Hour	0.00015	0.08	No

Since the maximum modeled impacts will not exceed the NAAQS for the 8-hour ozone standard, no further air quality modeling is required for this permit application.

**Section D - Ozone Assessment**

This source has reported annual emissions of volatile organic compounds (VOCs) as follows:

**TABLE 3**  
**Actual Source VOC Emissions**

Year	VOC Emissions (tons/yr)
2003	1350.7
2004	879.1
2005	731.6

Note: 2006 emissions are not due to be reported by the source until July 1, 2007.

VOCs are precursor compounds for the formation of ozone. Vigo County was reclassified as attainment for the 8-hour ozone standard on October 25, 2006. Therefore, it can be concluded that the source's existing VOC emissions have not prevented Vigo County from attaining the 8-hour ozone standard.

The National Ambient Air Quality Standard (NAAQS) for the 8-hour ozone standard is 0.08 parts per million (ppm). Bemis Company will be permitted an increase of 230.4 tons per year of VOC (after control) and 2.1 tons per year of NOx. When the increase is less than 480 tons per year of VOC and less than 40 tons per year of NOx, the maximum 8-hour ozone impacts are in the range of 0.00015 parts per million or less. Therefore, OAQ's Technical Support and Modeling Section concluded that the increase due to this proposed modification at Bemis Company, Inc. has negligible effect (<0.00015 parts per million) upon the regional ozone model for Vigo County, and that this county can continue to maintain the 8-hour ozone standard.

### Section E - Qualitative Analysis

All PSD permit applicants must prepare an additional impacts analysis for each pollutant subject to regulation under the Clean Air Act. This analysis assesses the impacts on economic growth, soils and vegetation, wildlife and plant species and visibility caused by any increase in emissions of any regulated pollutant from the source. Bemis Company, Inc. has provided this additional impact analysis. The results of the analysis follow.

#### Economic Growth

326 IAC 2-2-7(b) requires an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the major modification.

It is estimated that twenty-eight (28) additional jobs will be created as a result of the proposed modification. Bemis Company, Inc. believes that all of those additional jobs would be filled by the local workforce. Thus, no significant air quality impact is expected as a result of general commercial, residential, industrial, and other growth associated with this major modification.

#### Soils and Vegetation Analysis

326 IAC 2-2-7(a) requires an analysis of the impairment to soils and vegetation that would occur as a result of the major modification.

The location of the source is typical of west central Indiana. This project involves an existing structure and will not require any expansion of the existing buildings, roadways or other on site or off site support structures. As a result, there will be no manipulation of any terrestrial and/or aquatic resources and no secondary emission sources. Bemis Company, Inc. is already located in an industrial park in Terre Haute's northeast quadrant. The new processes will not disturb any resources such as agricultural land, historic or cultural sites or any scenic or recreational sites. The source is not located near any Class I areas such as a natural monument, a national primitive area, a natural preserve, a national recreation area, a national wild river, a national wildlife refuge, or a national lakeshore or seashore.

#### Federal and State Endangered Species Analysis

Bemis Company, Inc. is already located in an industrial park in Terre Haute's northeast quadrant. Of the federal and state endangered or threatened species found within Vigo County, none are expected to be adversely affected by the installation and operation of these presses.

## Visibility Analysis

326 IAC 2-2-7(a) requires an analysis of the impairment to visibility that would occur as a result of the major modification.

No visible emissions are expected. The VOC is colorless, and all burners associated with the operation of these processes are natural gas fired and have a maximum input rating of 10 million Btu per hour or less.

## Additional Analysis Conclusions

The source is not located near any Class I areas such as a natural monument, a national primitive area, a natural preserve, a national recreation area, a national wild river, a national wildlife refuge, or a national lakeshore or seashore. The results of the additional impact analysis conclude the installation and operation of these processes will have no significant impact on economic growth, soils, vegetation, or visibility in the immediate vicinity or on any Class I area.

### Section F - HAPs Analysis

The source is classified as an area source of HAPs because the source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs. The only HAPs associated with the modification are those that result from the combustion of natural gas. The source will remain classified as an area source of HAPs if this modification is approved. Therefore, a HAPs analysis was not performed.

### Section G - Summary of Air Quality Analysis

Vigo County is designated as attainment for all criteria pollutants. Currently, Vigo County and all surrounding counties are in attainment with the National Ambient Air Quality Standard (NAAQS) for ozone. This modification is not expected to cause any significant impact upon maintaining the 8-hour ozone standard. Also, the modification will have no significant impact on economic growth, soils, vegetation, or visibility in the immediate vicinity or on any Class I area.