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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:	September 18, 2006

RE: Bemis Company / 167-20981-00033

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 We make Indiana a cleaner, healthier place to live.

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

September 18, 2006

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

> Re: 167-20981-00033 PSD/Significant Source Modification to: Part 70 permit No.: T 167-6182-00033

Dear Mr. Rose:

Mr. Dan Rose

Bemis Company, Inc. was issued Part 70 operating permit T 167-6182-00033 on June 28, 2004 for a stationary polyethylene film production, printing, and converting source. An application to modify the source was received on March 18, 2005. A significant source modification, pursuant to 326 IAC 2-7-10.5 will be issued, since existing Presses #13 through #25 and Presses #27 through #35 are subject to 326 IAC 2-2:

- (1) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (2) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (3) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (4) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (5) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (6) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (7) 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.
- (8) 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.
- (9) 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.

- (10) 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.
- (11) 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.
- (12) 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.
- (13) 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.
- (14) 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.
- (15) 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.
- (16) 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.
- (17) 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.
- (18) 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.
- (19) 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.
- (20) 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.
- (21) 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.
- (22) 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.
- (23) Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.
- (24) Flexographic in-line portable printer attached to extruder #18, identified as E18, installed n 1986, using no control, and exhausting to stack 118.
- (25) Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.
- (26) One color, 2 side flexographic in-line portable printer attached to extruder #11, identified as E11, using no control, and primarily exhausting to stack 111.
- (27) Four (4) Catalytic Oxidizers identified as I1 through I4 and exhausting through Stacks S1 through

S4, each with a maximum heat input capacity of 3.0 million British thermal units per hour (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from Presses #11 through #18.

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

- (28) 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.
- (29) 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.
- (30) 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.
- (31) 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.
- (32) 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.
- (33) 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.
- (34) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (35) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.

Operating conditions from this source modification shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality

Attachments APD

CC:

File - Vigo County Vigo County Health Department Vigo County Air Pollution Control Air Compliance Section Inspector – Jennifer Schick Compliance Data Section Administrative and Development Brian Wells – Bemis Company, Inc.



Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner 100 North Senate Avenue Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

Part 70 PSD/SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY and VIGO COUNTY AIR POLLUTION CONTROL

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

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

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

PSD/Significant Source Modification No.: 167-20981-00033			
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 18, 2006		



SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (16) 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) 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) 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) 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) 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) 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) 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) 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) 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) 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) 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) Flexographic printing press, identified as press #31, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28) Flexographic printing press, identified as press #32, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (29) Flexographic printing press, identified as press #33, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (30) Flexographic printing press, identified as press #34, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (31) Flexographic printing press, identified as press #35, 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 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (46) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.
- (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 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:
 - Whenever any of the presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 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%.
 - (b) The capture system for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 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) and are not included in the calculation in (D) 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), 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 through 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]

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. 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.

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. The capture efficiency test 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 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.

Testing shall be conducted in accordance with Section C - Performance Testing.

- D.2.4 Oxidizer Temperature [326 IAC 2-2]
 - A continuous monitoring system shall be calibrated, maintained, and operated for measuring (a) 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). For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (15 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) 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 as observed during 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

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 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) 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.2.6 Parametric Monitoring [326 IAC 2-2]
 - (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, and #35:

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

	Indicator #1	Indicator #2	Indicator # 3
I. Indicator	Work Practice	Work Practice	Pressure differential
Measurement Approach	Inspect the operational condition of the control device bypass damper, the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.	Inspect operational condition of bypass damper position interlock.	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.
II. Indicator Range	An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised.	An excursion is identified as any finding that the bypass interlock is inoperative.	An excursion is defined as a pressure differential of less than negative (-)0.007" w.c. for 5 consecutive minutes while the process is operating; alternatively, a smaller differential (i.e., less than (-)0.007" w.c.) can be used as the indicator if such differential is demonstrated as adequate to satisfy the permanent total enclosure with Method 204 criteria.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a	Any excursion shall require that the process be immediately shut down and remain down until the	average value can be used as the indicator range. Each excursion triggers an assessment of the problem, corrective action and a reporting
	reporting requirement.	problem can be corrected. Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	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

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
11.	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				
	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.
В.	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 <u>+</u> 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of	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 analysis and corrective actions taken in response to excursions.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
F. Reporting				Number, duration, cause of any excursion and the corrective action taken.
Frequency	Quarterly	Annually.	For each performance test conducted.	Annually.

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
Π.	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			
Α.	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°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.
В.	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 <u>+</u> 20°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.

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

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). 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 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 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

- (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 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).
- (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.4

FACILITY OPERATION CONDITIONS

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

- (32) Flexographic in-line portable printer attached to extruder #11, identified as E-11, 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.
 - Records shall include purchase orders, invoices, material safety data sheets (A) (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.
- The total VOC usage for each month; and (3)
- The weight of VOCs emitted for each compliance period using methods identified in (4) condition D.4.3.
- All records shall be maintained in accordance with Section C General Record Keeping (b) 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 Aresponsible official@as defined by 326 IAC 2-7-1(34).

SECTION D.5

FACILITY OPERATION CONDITIONS

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

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

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 #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 #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

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 flexographic printer identified as presses #13 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 through 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]

Testing of the catalytic oxidizers (I1 through I4) to verify their destruction efficiencies was performed on June 27, 2005. The oxidizers' destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

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. The capture efficiency test 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 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.5.4 Oxidizer Temperature [326 IAC 2-2]
 - (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 printing presses (presses #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

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 printing presses (presses #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

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 #13 through #18) is exhausted to this common press exhaust plenum and controlled by the nearest operating oxidizer(s).

Presses #13 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 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) 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

- (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]

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

	Indicator #1	Indicator #2	Indicator # 3
I. Indicator	Work Practice	Work Practice	Pressure differential
Measurement Approach	Inspect the operational condition of the control device bypass damper, the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.	Inspect operational condition of bypass damper position interlock.	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.
II. Indicator Range	An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised.	An excursion is identified as any finding that the bypass interlock is inoperative.	An excursion is defined as a pressure differential of less than negative (-)0.007" w.c. for 5 consecutive minutes while the process is operating; alternatively, a smaller differential (i.e., less than (-)0.007" w.c.) can be used as the indicator if such differential is demonstrated as adequate to satisfy the permanent total enclosure with Method 204 criteria. Alternatively, a three hour average value can be used as the indicator range.

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

		Indicator #1	Indicator #2	Indicator # 3
	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.
111.	Performance Criteria			
Α.	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.
В.	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 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

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 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.

	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 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°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) Monitoring Approach For Catalytic Oxidizers

		Indicator #1	Indicator #2	Indicator #3	Indicator #4
В.	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 $\pm 20^{\circ}$ F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.
	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.

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 #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.

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

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:

Bemis Company, Inc. 1350 North Fruitridge Ave., Terre Haute, Indiana 47804 PO Box 905, Terre Haute, Indiana 47808 T167-6182-00033 In-line Press E11 VOC usage from E11 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		(10110)	(12112)
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 form.

Indiana Department of Environmental Management Office of Air Quality

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

Source Name:	Bemis Company, Inc.			
Source Location:	1350 North Fruitridge Avenue, Terre Haute, Indiana 47804			
County:	Vigo			
SIC Code:	2673, 3081, and 3079			
Operation Permit No.:	167-6182-00033			
Operation Permit Issuance Date:	June 28, 2004			
PSD/Significant Source Modification No.:167-20981-00033				
Significant Permit Modification No.:	167-21257-00033			
Permit Reviewer:	Aida De Guzman			

On June 3, 2006, the Office of Air Quality (OAQ) had a notice published in the Tribune Star, Terre Haute, Indiana, stating that Bemis Company, Inc., had applied for a PSD Significant Source Modification and Significant Permit Modification. The proposed modification would allow Bemis Company, Inc. to operate their existing Presses #13 through #25 and Presses #27 through #35, which are undergoing PSD review due to exceedance of their individual VOC limits as explained in the TSD, thus violating 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.

Upon further review, IDEM has made the following clarifications and corrections to typographical errors (additions are **bolded** and deletions are struck-through for emphasis):

- (1) Based on IDEM, OAQ Guidance, if the thermal oxidizer is required pursuant to a BACT requirement under 326 IAC 2-2-3 or 326 IAC 8-1-6, which in this case 326 IAC 2-2-3 applies for emission units in SECTIONs D.2, D.5, and D.6, then the temperature requirement on the RTO should be in the **Compliance Determination Section** of the permit. In all other cases, the temperature is a **Compliance Monitoring Requirement**. Changes have been made to be consistent with this Guidance.
- (2) Condition B.23 has been changed as follows:
- B.23
 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:
- (3) Conditions D.2.3, D.3.3, D.3.7(a), D.5.3, D.5.6(a), and D.6.3 have been corrected as follows:
- D.2.3
 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

 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. 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.

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. The capture efficiency test shall only 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 the presses, which include any of the following:

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

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.** Testing of the catalytic oxidizers (15 through 112) 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.

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) from the most recent performance test that demonstrates compliance with the limits in Conditions D.3.1 and D.3.2.
- D.5.3
 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

 Testing of the catalytic oxidizers (I1 through I4) to verify their destruction efficiencies was performed on June 27, 2005. The oxidizers' destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

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) 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. The capture efficiency test shall only 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:

D.5.6 Parametric Monitoring

(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 limits in Conditions D.5.1 and D.5.2.

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

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.6.1 and D.6.2.** Testing of the catalytic oxidizers (15 through 112) 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.

(4) Condition D.2.4(a) Table was corrected to put a comma after I8:

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

Oxidizer ID	Minimum 3-Hour Average Temperature (°F)
15, 16, 17, 19, 110, 111	550
18, 112	600
l13	1600

(5) Conditions D.2.4(c), D.3.5(c), D.5.4(c), D.6.5(c) have been clarified as follows:

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

(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 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.3.5 Oxidizer Temperature

(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 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.5.4 Oxidizer Temperature [326 IAC 2-2]

(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.6.5 Oxidizer Temperature

(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.

(6) Conditions D.2.5(a), D.3.6(a), D.5.5(a) and D.6.6(a) were amended to add the word "capacity" after maximum flow rate.

D.2.5, D.3.6, D.5.5, and D.6.6 Oxidizer Grouping

- (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.
- (7) Condition D.2.6(a) was corrected as follows:
- D.2.6 Parametric Monitoring [326 IAC 2-2]
 - (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 recent performance test that demonstrates compliance with the VOC limits in Condition D.2.1 and D.2.2.
- (8) Condition D.2.8(a) was corrected for consistency purposes.
- 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). 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.
- (9) Condition D.3.2(a) has been corrected to delete the close parenthesis after #36 as follows:
- 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.
- (10) Condition D.3.4(a) has been corrected to add "#36" as follows:

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 each press #36.
- (11) Conditions D.3.8(a) CAM Table and D.5.7(a) Table have been revised by removing the column lines to be consistent with the other CAM Tables in the permit.

(12) Conditions D.2.9(a)(2), D.3.7(a), D.3.10(b)(2), D.5.4(b), D.5.6(a), D.5.9(a)(2), and D.6.10(b)(2) have been revised to add "OAQ and VCAPC" as follows:

D.2.9 Record Keeping Requirements

- (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:
 - (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**).

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.

D.3.10 Record Keeping Requirements

(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:
 - (2) Daily records of the monitoring parameter value (duct pressure, or fan amperage, or other parameter as approved by IDEM, OAQ and VCAPC).
- D.5.4 Oxidizer Temperature [326 IAC 2-2]
 - (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**.
- D.5.6 Parametric Monitoring
 - (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 Condition D.5.1.

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.
 - (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**).

D.6.10 Record Keeping Requirements

(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.
 - (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**).

- (13) Condition D.5.2(b) has been corrected by adding an "s" after catalytic oxidizer:
- D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]
 - (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the four (4) catalytic oxidizers (11 through I4) shall maintain a minimum destruction efficiency of 90%.
- (14) Condition D.5.3 has been corrected by adding the word "printing" after (e.g.... verify the system capture efficiencies of six (6) **printing** presses...).
- D.5.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2] 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 Condition D.5.1 utilizing methods as approved by the Commissioner.
- (15) For clarification purposes the sentence "Testing of presses #11 and #12 to verify their system captures efficiencies was performed on June 27, 2005" has been added in the Condition D.5.3. The word "only" has been deleted from all testing conditions in the permit as follows:
- D.5.3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2] 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 Condition D.5.1 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.** The capture efficiency test shall only 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:
- (16) The word "Press" in Condition D.5.4(a) has been changed to "presses".
- D.5.4 Oxidizer Temperature [326 IAC 2-2]
 - A continuous monitoring system shall be calibrated, maintained, and operated for (a) 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 (Press 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.

(17) The mailing address used in the following Reporting Form on page 81 of the proposed permit has been changed from 1350 North Fruitridge Ave., Terre Haute, Indiana 47804 to P.O. Box 905, Terre Haute, Indiana 47808.

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

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address:	Bemis Company, Inc. 1350 North Fruitridge Ave., Terre Haute, Indiana 47804 1350 North Fruitridge Ave., Terre Haute, Indiana 47804	
-	P.O. 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: Press #37 and Press #38 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total
1			
2			
3			

9 No deviation occurred in this quarter.

OLIADTED.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

Attach a signed certification to complete this report.

Vigo's redesignation to maintenance attainment is effective federally February 6, 2006. Vigo is still considered nonattainment for the 8-hour ozone standards, since its redesignation has not been incorporated into Indiana's rules. No changes have been made to SECTION A.1.

IDEM, OAQ has added the following table to show the source's actual VOC emissions from July 2004 to June 2005:

Press ID	VOC Limits	Actual VOC Emissions
		Reported
Presses #13, #14, #15,	Combined limit of < 94 tons/yr	114.13
and #16		
Presses #17 and #18	Combined limit of	55.44
	< 39.9 tons/yr	
Presses #19 and #20	Combined limit of < 39.9 tons/yr	44.01
Presses #21 and #22	Combined limit of < 39.9 tons/yr	39.83
Presses #23, #24, and #25	Combined limit of < 74.1 tons/yr	85.87
Presses #27, #28, #29,	Combined limit of < 38.8 tons/yr	37.97
and #30		
Presses #31 and #32	Combined limit of <19.32 tons/yr	27.18
Press #33	< 9.72 ton/yr	12.07
Presses #34 and #35	Combined limit of <16.85 tons/yr	7.01
Press #36	<39.99 tons/yr	21.95
In-Line Press E11	< 18 tons/yr	1.74
In-Line Press E17	< 25 tons/yr	0.09
In-Line Press E18	< 25 tons/yr	0.66
In-Line Press E19	< 25 tons/yr	0.31

On June 22, 2006, U.S. EPA, Region 5 made the following comments to the proposed Significant Source Modification and Significant Permit Modification (additions are **bolded** and deletions are struck-through for emphasis):

- Comment 1: Paragraph (i) on pg 6 of the TSD says that the Part 70 permit required that E17, E18, and E19 be subject to PSD rules. However, this permit states that these units are not subject to PSD. How did these units get out of PSD requirements?
- Response 1: The TSD in the proposed permit (167-21257-00033) was not quite clear on the PSD issue, and this Addendum to the TSD has made the following clarification:

As stated in the TSD of the proposed permit (167-21257-00033):

(i) The Part 70 permit required that In-Line Printing Presses E5, E15, E17, E18, E19, E22, E23, and E31 be subject to PSD rules.

This statement (i) is a general statement and should not be construed that all these presses were permitted and constructed at the same time. The basis of the PSD determination that is in the TSD was excerpted from the Part 70 TSD (167-6182-00033), which did not group E17, E18, and E19 together, since E19 was not constructed nor permitted at the same time as E17 and E18. E17, E18, and two other dismantled in-line presses (E22 and E23), were constructed in 1986, and have had a combined emissions in 1999 of 50.7 tons per year, which exceeded 40 tons per year. Based on this exceedance the Part 70 stated that E17, E18, E22 and E23 should have gone through PSD or be limited to less than 40 tons per year. E22 and E23 have been removed from operation and E17 and E18 had never emitted above 40 tons per year for the past ten (10) years. The highest combined emission on record for these two in-line presses was in 1999 at 20.1 tons per year. Therefore, E17 and E18 are not required to be subject to PSD. The draft permit establishes a combined limit of less than 40 tons per year to avoid the applicability of the PSD standards, in Condition D.4.1(d). However, this condition has been deleted and required E17, E18, and E19 to comply with the Compliance

Plan in Condition D.4.2 by December 31, 2006. See related Response 2 below.

- Comment 2: Paragraph (j) of the TSD says that units E17, E18, and E19 were individually limited to less than 25 tpy in the Title V permit to avoid 326 IAC 8-5-5. The TSD says that this determination will remain the same, "instead of requiring these inline presses to be subject to 326 IAC 8-5-5 since the source already has exceeded the applicability threshold." This is not clear to me. It says the limits to avoid 8-5-5 will remain the same, but then says the source has already exceeded the 25 tpy threshold. Could you please clarify this?
- Response 2: The following statement is a clarification to paragraph (j) of the TSD: The TSD for the draft permits PSD/Significant Source Modification No.: 167-20981-00033 and Significant Permit Modification No.: 167-21257-00033, indicates that this source is subject to the 25 tons per year applicability threshold (sources constructed after November 1, 1980). However, this source was constructed prior to 1980 and therefore, the applicability threshold of 326 IAC 8-5-5 is 100 tons per year. Bemis is subject to this rule, since it has a potential VOC emissions of greater than 100 tons of VOC per year. The facilities or emission units under this subject source or plant are required to comply with the capture system requirements in 326 IAC 8-5-5 (e)(3) to achieve an overall control of sixty percent (60%), and 326 IAC 8-5-5(c)(3)(B), which requires an incineration system of 90% destruction efficiency when using solvent based inks.

In-Line Press, E11, which was constructed in 2000 has been limited to less than 25 tons per year to avoid the requirements for an add on control in 326 IAC 8-5-5(c) and (e), and it is not in violation of this rule.

IDEM has determined that the three (3) In-Line Presses, E17 and E18, which were both constructed in 1986 and E19, which was constructed in 1988 are not in compliance with the requirements of 326 IAC 8-5-5. These three in-line presses will be subject to a Compliance Plan by December 31, 2006.

SECTION D.4 has been revised as follows:

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

- D.4.1 Volatile Organic Compounds (VOC) use [326 IAC 2-2][326 IAC 8-5-5]
 - (a) The annual VOC usage on In-Line Press E19 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 E19 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).
 - (b) The annual VOC usage on In-Line Press E11 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 E11 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).
 - (c) The annual VOC usage on In-Line Press E17 and In-Line Press 18 shall each 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 E17 and Press 18 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).
 - (d) The combined VOC usage on both In-Line Press E17 and In-Line Press 18 shall not exceed 39.9 tons per 12 consecutive month period with compliance determined at the end of each month. Compliance with this condition shall make

these two in-line presses not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration.

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 inline presses by January 10, 2007.

D.4.23 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) by 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 each this press.

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

- D.4.34 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 each 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 (by press) 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.4.45 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 **I**responsible official@as defined by 326 IAC 2-7-1(34).

The following reporting form has been revised:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION and

VIGO COUNTY AIR POLLUTION CONTROL

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:

 Bemis Company, Inc.

 1350 North Fruitridge Ave., Terre Haute, Indiana 47804

 PO Box 905, Terre Haute, Indiana 47808

 T167-6182-00033

 In-line Presses E-11, E17, E18, E19

 VOC usage from E11, E17, E18, and E19 shall be limited as follows:

 E-11 - not to exceed 24.9 tons per 12 consecutive month period, E17 - not to exceed 24.9

 tons per 12 consecutive month period, E18 - not to exceed 24.9 tons per 12 consecutive month period

 E17 & E18 combined limit - not to exceed 39.9 tons per 12 consecutive month period

Compliance from all limits with the limit shall be determined at the end of each month

QUARTER:	YEAR:
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Month	E11-VOC	E11-VOC Usage for	
	Usage This Month		Usage for 12 Month
	(tons)	Months	Period
		(tons)	(tons)
1			
2			
3			

Month	PRESS ID	E11	E17	E18	E19	Combined Total for E17 & E18
	Tons VOC Usage This Month					
Month 1	Tons VOC Usage Past 11 Months					
	Tons VOC Usage 12 Month Total					
Month 2	Tons VOC Usage This Month					
	Tons VOC Usage Past 11 Months					

	Tons VOC Usage 12 Month Total			
Month 3	Tons VOC Usage This Month			
	Tons VOC Usage Past 11 Months			
	Tons VOC Usage 12 Month Total			

- Comment 3: Paragraph (j)(C) of the TSD says that Bemis claims that press E11 and Presses 31 & 32 were independent projects. They were permitted 2 months apart (in 2000) and were originally considered to be part of the same project. What is the basis for IDEM reversing its previous determination and relaxing the limit for E11?
- Response 3: In-line press (E11) and wide web printing presses (#31 and #32) are considered different projects, because of their functional differences, line speed, color capabilities and the type of markets and products each is producing. There is no interdependency between these two types of operations in producing their respective products.

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 Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description		
Source Name:	Bemis Company, Inc.	
Source Location:	1350 North Fruitridge Ave., Terre Haute, Indiana 47804	
County:	Vigo	
SIC Code:	2673, 3081, and 3079	
Operation Permit No.:	T167-6182-00033	
Operation Permit Issuance Date:	June 28, 2004	
PSD Significant Source Modification N		
Significant Permit Modification No.:	SPM 167-21257-00033	
Permit Reviewer:	Aida De Guzman	

Existing Approvals

The source was issued Part 70 Operating Permit No. T167-6182-00033, issued on June 28, 2004. The source has since received the following approvals:

- (a) First Significant Permit Modification SPM 167-19669-00033, issued on June 20, 2005. This permit is on appeal.
- (b) Second Significant Permit Modification SPM 167-21603-00033, issued on January 20, 2006.

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM2.5	attainment
PM-10	attainment
SO ₂	Maintenance/attainment
NO ₂	attainment
8-hour Ozone	non-attainment
1-hour ozone	attainment
CO	attainment
Lead	Not determined

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as non-attainment for the 8-hour ozone standards. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) Vigo County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Vigo County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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-10	Less than 100
SO ₂	Less than 100
VOC	Greater than 250
CO	Less than 100
NO _x	Less than 100

- (a) This existing source is a major stationary source under Emission Offset (326 IAC 2-3) because VOC is emitted at a rate of 100 tons per year or more.
- (b) The existing source is not a major stationary source under 326 IAC 2-2, Prevention of Significant Deterioration because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

Actual Emissions

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

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

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Bemis Company on March 18, 2005 relating to the following existing twenty-two (22) flexographic presses, four (4) in-line presses, and control devices:

(1) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.

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

- (20) Flexographic printing press, identified as press #33, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (21) Flexographic printing press, identified as press #34, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (22) Flexographic printing press, identified as press #35, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12.
- (23) Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.
- (24) Flexographic in-line portable printer attached to extruder #18, identified as E18, installed n 1986, using no control, and exhausting to stack 118.
- (25) Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.
- (26) One color, 2 side flexographic in-line portable printer attached to extruder #11, identified as E11, using no control, and primarily exhausting to stack 111.
- (27) Four (4) Catalytic Oxidizers identified as I1 through I4 and exhausting through Stacks S1 through S4, each with a maximum heat input capacity of 3.0 million British thermal units per hour (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from presses #11 through #18.
- (Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)
- (28) 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.
- (29) 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.
- (30) 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.
- (31) 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.
- (32) 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.
- (33) 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.
- (34) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.

(35) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.

History

- Press #13, Press #14, Press #15, and Press #16 were issued a construction permit PC 84-1669 on November 25, 1987. This permit limited combined VOC emissions to 7.83 tons per month (94 tons per year). Although, the TSD for the Part 70 permit stated that these four (4) presses never exceeded their VOC limit (see page 18 of 29), the Permittee, has decided that they will be included in the PSD review.
- Press #17, Press #18, Press #19, and Press #20 were issued two (2) separate construction permits in 1990. Construction permit PC 84-1842 was issued on April 6, 1990 for Press #17, Press #18 with VOC input limit of 11.96 tons per month (143.5 tons per year), which is equivalent to 39.9 tons per year after control. Construction permit PC 84-1896 was issued on November 10, 1990 with VOC input limit of 17.3 tons per month (207.3 tons/year), which is equivalent to less than 40 tons per year after control.

The Part 70 permit in Condition D.2.1(c), states that the Permit Shield does not apply to Press #17 and Press #18 with regard to 326 IAC 2-2 (PSD).

Also, in order to avoid circumvention of the PSD rule by the splitting of these four presses into two permits, both issued in 1990, the source decided that these presses will be reviewed under the PSD rules.

- (c) Press #21 and Press #22 were issued a construction permit (CP 167-2146) issued on October 22, 1991. In this permit the presses were limited to their input VOC to 207.3 tons/year, which is equivalent to 39.9 tons per year after control. The TSD for the Part 70 permit on page 20 of 29 also stated that these presses never exceeded the PSD VOC limit. However, the Permittee decided that they will be included in the PSD review.
- (d) Press #23, Press #24, and Press #25 were permitted in construction permit CP 167-3392-00033, issued on April 11, 1994. In this permit the presses were limited to less than 74.1 tons per year after control. Condition D.3.1 of the Part 70 permit indicated that these presses are subject to PSD review and will be reopened through 326 IAC 2-7-9 (Permit Reopening).
- (e) Press #27, Press #28, Press #29, and Press #30 were permitted in construction permit CP 167-V014-00033, issued on May 30, 1997. In this permit the presses were limited to 38.8 tons per year after control. The Part 70 indicated that these presses did not exceed the PSD VOC limit. However, the Permittee decided that they will be included in the PSD review.
- (f) Press #31 and Press #32 were permitted in Significant Source Modification 167-11568-00033, issued on February 1, 2000. In this permit the presses were limited to less than 19.32 tons per year of VOC after control, which is below PSD level. However, the Permittee decided that they will be included in the PSD review.
- (g) Press #33 was permitted in Significant Source Modification 167-16521-00033, issued on April 10, 2003. This permit limited the press VOC input to 193.25 tons per year, which is equivalent to 9.66 tons of VOC after control. This press is not subject to PSD. However, the Permittee decided that they will be included in the PSD review.
- (h) Press #34 and Press # 35 were permitted in Significant Source Modification 167-12790-00033, issued on January 23, 2001. In this permit the presses were limited to VOC input of 337.31 tons per year, which is equivalent to 16.85 tons per year after control. The Part 70 permit indicated that these presses are not subject to PSD. However, the Permittee decided that they will be included in the PSD review.

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(i) The Part 70 permit required that In-Line Printing Presses E5, E15, E17, E18, E19, E22, E23, and E31 be subject to PSD rules.

Bemis has physically removed in-line printing presses E2, E5, E12, E13, E15, E20, E22, and E23 which is a reduction of 78.4 tons per year in actual emissions. This reduction was taken from the 1999 actual emissions which represents the highest emissions in 10 years for these eight in-line presses. E31 was removed in August 2005 with a reduction of 33.9 tons per year, emitted in the year 2000, which represents the highest emissions in 10 years.

- (j) In Line Presses E5, E15, E20, E22, E23 and E31 already removed, including the remaining In-Line Press E17, E18, and E19 were individually limited to less than 25 tons per year in the Part 70 permit to avoid the applicability of 326 IAC 8-5-5 (Graphic Arts Operations). IDEM has decided that this previous determination made under 326 IAC 8-5-5 for these in-line presses will remain the same, instead of requiring these in-line presses to be subject to 326 IAC 8-5-5 since the source already has exceeded the applicability threshold of 25 tons per year. IDEM has decided that the remaining four in-line presses (E11, E17, E18, and E19) will remain limited to less than 25 tons per year to comply with 326 IAC 8-5-5, at the same time be limited as follows to avoid PSD review:
 - (A) In-line Presses E17 and E18 installed in 1986 shall be limited to less than 25 tons per year individually and combined emissions from both presses shall not exceed 40 tons per year.
 - (B) In-line Press E19 will continue to be limited to less than 25 tons per year.
 - (C) In-line Press E11 was limited to 18 tons per year, pursuant to SSM 167-11853-00033, issued on April 4, 2000. Press #31 and Press #32 were limited to 19.32 tons per year pursuant to SSM 167-11568-00033, issued on February 1, 2000. Combined limit is equivalent to 37.3 tons per year.

Bemis reiterated that in-line Press E11 should have been treated as an independent project and its PTE should not have been combined with Presses #31 and #32. Bemis requested that E11 be limited to 25 tons of VOC per year.

Bemis Company submitted a PSD application to the OAQ to address the PSD violation on March 18, 2005.

Enforcement Issues

Stool Summon

IDEM is aware that there is a pending enforcement action for these presses for exceeding their VOC emission limits. IDEM is reviewing this matter and will take appropriate action.

Stack Summary					
Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (⁰ F)
S1	Presses 13, 14, 15, 16, 17 18	50	1.4	10,000	300 ⁰ F
S2	Presses 13, 14, 15, 16, 17, 18	50	1.4	10,000	300 ⁰ F
S3	Press 13, 14, 15, 16, 17, 18,	50	1.4	10,000	300 ⁰ F
S4	Presses 13, 4, 15, 16, 17, 18	50	1.4	10,000	300 ^o F
S5	Presses 19 -25, 27-38	54	2.7	12,200	300 ⁰ F

					0
S6	Presses 19 -25, 27-38	54	2.7	12,200	300 ⁰ F
S7	Presses 19 -25, 27-38	54	2.7	12,200	300 ⁰F
S8	Presses 19 -25, 27-38	54	2.7	12,200	300 ⁰F
S9	Presses 19 -25, 27-38	54	3.0	18,300	300 ⁰F
S10	Presses 19 -25, 27-38	54	3.0	18,300	300 ⁰ F
S11	Presses 19 -25, 27-38	54	3.0	18,300	300 ⁰ F
S12	Presses 19 -25, 27-38	30	3.0	18,300	300 ⁰ F

Note: Although this stack information is only for new emission units, this information is necessary for these existing presses for the purpose of doing air modeling.

Emission Calculations

Detailed potential to emit calculations for these existing twenty-two (22) presses is not necessary, as the PSD review was triggered due to some presses exceedance of their respective VOC limits.

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 emissions 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, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	12,200.2
CO	0.0
NO _x	0.0

Note: 89.5 tons per year (details in the **History Section**, item (j)(A), (j)(B), and (j)(C)) comes from In-Line Presses E11, E17, E18, and E19. The rest of VOC emission is from the 22 presses.

Justification for the Permit Modification

(a) Due to exceedance of the VOC limits by five (5) presses, as explained above, these presses violated the PSD rules, 326 IAC 2-2 and 40 CFR Part 52.21(r)(4). Based on the USEPA Injunctive Relief Guidance, these presses identified in the **History Section** of this TSD which have violated PSD requirements should now have to undergo a major NSR review and whatever technology is BACT at the time of the major NSR review should be the BACT required for these presses. Note: The source has decided to put all twenty-two (22) presses, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 into PSD review, although some of them did not exceed their respective VOC limits.

These Presses will go through PSD review under 326 IAC 2-2, instead of Emissions Offset, 326 IAC 2-3 since the violation occurred when the county was designated as attainment for ozone.

(b) The modification is subject to a Significant Permit Modification under 326 IAC 2-7-12(d), as it involves significant changes to the monitoring, recordkeeping, and reporting permit terms or conditions.

Federal Rule Applicability Determination

- (a) 326 IAC 12, (40 CFR 60.430), Subpart QQ Standards of Performance for the Graphic Arts Industry. This rule applies specifically to publication rotogravure printing. Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 are not subject to this NSPS, as they are flexographic printing presses.
- (b) 326 IAC 14, (40 CFR Part 63.820, Subpart KK National Emission Standards for the Printing and Publishing Industry). This applies to publication rotogravure, product and packaging rotogravure, or wideweb flexographic printing presses. Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 are wide-web flexographic printing presses as defined under Subpart KK. However, because the source is not a major source of HAPs, the source is only subject to minor recordkeeping and 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:

- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 meet all 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 #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35:

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.

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

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

(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.
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 typica 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.	Inspection records.	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria <u>+</u> 20F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
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 catalyst analyses and corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Submit test protocol and notification of testing to IDEM at least 35 days prior to test date. Submit test report 45 days after conducting a performance test.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Semiannually.	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.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration)
 - (1) Due to exceedance of the VOC limits by five (5) presses and eight (8) in-line presses, as explained above, these presses violated the PSD rules, 326 IAC 2-2 and 40 CFR Part 52.21(r)(4). The source has decided to put all twenty-two (22) presses, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 into PSD review, although some of them did not exceed their respective VOC limits.

These presses will go through PSD review under 326 IAC 2-2, instead of Emissions Offset, 326 IAC 2-3 since the violation occurred when the county was designated as attainment for ozone.

- (2) In-line presses E11, E17, E18, and E19 will not be subject to the requirements of 326 IAC 2-2, PSD, and they will be limited as follows:
 - (A) In-line presses E17 and E18 shall be individually limited to less than 25 tons per year and combined emissions from both presses shall not exceed 40 tons per year.
 - (B) In-line Press E19 shall be limited to less than 25 tons per year.
 - (C) In-line Press E11 shall be limited to less than 25 tons per year.
- (b) 326 IAC 2-2-3 (PSD Rule: Control Technology Review Requirements) Based on the USEPA Injunctive Relief Guidance, Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 which violated PSD requirements must now undergo a major NSR review and whatever technology is BACT at the time of the major NSR review must be the BACT required for these presses.
 - (1) The BACT/LAER 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 which lists the following:

BACT/LAER ESTABLISHED FOR FLEXOGRAPHIC PRINTING OPERATIONS AS COMPARED TO BEMIS COMPANY, INC.			
Company Name/Year Permitted	Operation	Limit	Control Technology
Proposed BACT for Bemis Company, Inc. – Terre Haute, Indiana	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	None	Existing Catalytic Oxidation System with capture system of 100% and 95% destruction efficiency
Bemis Company, Inc. – Terre Haute, Indiana	Flexographic Printing Presses #11, #12	None	Existing Catalytic Oxidation System with capture system of 100% and 95% destruction efficiency

BACT/LAER ESTABLISHED FOR FLEXOGRAPHIC PRINTING OPERATIONS AS COMPARED TO BEMIS COMPANY, INC.				
Company Name/Year Permitted	Operation	Limit	Control Technology	
C-P Converters – Pennsylvania 01/09/2003	Flexographic Printer	24 tons/yr	Catalytic Incinerator – 100% permanent total enclosure, 95% destruction efficiency	
Pechiney Plastic Packaging – Wisconsin 09/25/2002	Flexographic Press	5% of total mass of VOC	Catalytic or Regenerative Themal Oxidizer - 100% permanent total enclosure, 95% destruction efficiency	
Curwood, Inc. – Wisconsin 06/11/2002	Flexographic Press	19.6 lbs/hr	Catalytic Oxidizer – 100% capture of the permanent total enclosure, 95% destruction efficiency	
American Packaging Corporation - Iowa	Flexographic Press	0.041 lb of VOC/lb materials	Thermal Oxidizers – 100% capture 95% destruction	
Bemis Films – BSF Facility Wisconsin 06/01/2001	Flexographic Press	5% of total mass VOC	Catalytic Oxidizer – 100 % capture of the permanent total enclosure, 95% destruction efficiency	
International Paper -Michigan	Flexographic Press	1.04 lb VOC/lb solids	No control	
Millprint, Inc. – Wisconsin 06/02/1999	Flexographic Press	Can't find it anymore in the RLBC data base	*Catalytic Oxidizer – 100% total enclosure, 95% destruction	
Bemis Films – Wisconsin 04/20/98	Flexographic Press	17.3 lb/hr	Catalytic Oxidizer – total enclosure of control impression section of the flexographic press, 95% destruction	

*Millprint, Inc. – The USEPA BACT/RACT/LAER Clearinghouse shows 99% destruction efficiency. IDEM has verified this number with the source contact (Howard Hofmeister –(920) 303-7417), and it should be 95%.

The most stringent BACT/LAER found for flexographic printing presses in the USEPA BACT/RACT/LAER Clearinghouse is a press with 100% capture efficiency and the use of a catalytic oxidizer with 95% destruction efficiency, and a VOC emission limit of 5% total mass of VOC or 0.041 lb of VOC/lb materials.

(2) IDEM, OAQ has made further search for similar operations that control VOC emissions. The RBLC Clearinghouse and few permits issued by the agency for rotogravures control the VOC emissions using thermal oxidation system with 98% destruction efficiency and 100% capture efficiency. Based on these findings, Bemis Company was required to evaluate if 98% destruction efficiency is feasible to achieve by their current VOC controls. Historical destruction efficiency tests performed on thirty-seven (37) of the catalytic and regenerative thermal oxidizers within Bemis flexible packaging plants show that the extreme variability of the VOC in Bemis air stream resulted in different efficiency levels in the destruction, ranging from an average of 91.8% to 99.9%. Therefore, 98% destruction efficiency is not technically feasible for Bemis Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, since it cannot be continuously achieved due to this extreme variability of the VOC air stream.

Conclusion: Bemis Company's existing catalytic oxidizers at 95% destruction efficiency and 100% capture, fit the most stringent BACT for flexographic operation, therefore, no cost analysis is necessary.

Best Available Control Technology (BACT)

The PSD BACT determined for Bemis Company for the following presses will be consistent with the BACT determined in Bemis PSD Permit 167-19667-00033, issued May 2, 2005:

- (1) Whenever any of the Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 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%.
- (2) Performance testing to verify VOC control efficiency of the catalytic oxidizers.
- (3) Continuous monitoring of the temperature at the inlet to the catalyst bed of the catalytic oxidizers.
- (4) Record Keeping of the continuous temperature at the inlet to the catalyst bed (on a three- hour average basis) for the catalytic oxidizers and the three-hour average temperature at the inlet to the catalyst bed used to demonstrate compliance during the most recent compliant performance test, and daily records of the duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM.
- (5) The capture efficiency system for Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 shall be considered one-hundred (100) percent if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:
 - (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 NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
 - (D) 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.
 - (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.

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.

(c) 326 IAC 2-2-4 (PSD Rule: Air Quality Analysis Requirements)

Pursuant to section (a) of this rule "any application for a permit under the provisions of this rule shall contain an analysis of ambient air quality in the area that the major modification would affect for each of the following pollutants:

(1) For a modification, each regulated NSR pollutant for which the modification would result in a significant emission increase.

Since Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 violated PSD requirements under 326 IAC 2-2 and 40 CFR Part 52.21(r)(4) by emitting greater than the applicable VOC limit, these presses are subject to PSD review and an air quality analysis will be required.

The Technical Support and Modeling Section reviewed the emissions information in the permit application for Bemis Company of Terre Haute. This source has reported annual emissions of Volatile Organic Compounds (VOCs) in the range of 1300 tons to 1800 tons during the past three years. VOCs are precursor compounds for the formation of ozone. Vigo County is currently listed as non-attainment for the 8-hour ozone standard, although the monitored values in the past three years have met the ambient air quality standard and IDEM has requested that U.S. EPA redesignate the county to attainment.

After reviewing the permit, it appears that VOC emissions will be lowered. Since the county reached attainment for 1-hour ozone with Bemis at current emission levels, it can be assumed that the county will continue to maintain the 1-hour ozone standard if VOCs are reduced. Therefore, there is no further air quality analysis required for this permit.

(d) 326 2-2-5 (PSD Rule: Air Quality Impact Requirements) Section (a) of this rule states that 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 section 6 of this rule.

Section (e) of this rule 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.

This modification does not result in a nonattainment pollutant incremental consumption that will cause significant degradation of the air quality in the area, since there is a net decrease in the allowable VOC emissions due to a more stringent control required by the PSD BACT.

(e) 326 IAC 2-2-12 (PSD RulePermit Rescission) The PSD permit or the source modification permit shall remain in effect unless it is rescinded, modified, revoked or expires.

State Rule Applicability - Individual Facilities

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

Pursuant to 326 IAC 8-5-5(c)(3)(B), when using solvent based inks shall have an incineration system of 90% destruction efficiency. Bemis Company, Inc. can comply with this rule, provided Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 operate the associated catalytic oxidizers which are designed to achieve above 90% destruction efficiency.

- (2) In-line presses E11, E17, E18, and E19 are not subject to 326 IAC 8-5-5 because each press is limited to less than 25 tons per year.
- (b) 326 IAC 8-1-6 (General Reduction Requirements) This rule does not apply to Presses #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35, as these presses are subject to 326 IAC 8-5-5.

Compliance Requirements

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

Changes to the Part 70 Permit

The Part 70 Permit T167-6182-00033, issued on June 28, 2004 will be modified to incorporate the PSD/Significant Source Modification 167-20981-00033. This modification will also address the appeal resolution 167-19794-00033 for the issued Part 70 permit, the appeal resolution 167-21295-00033 for the issued PSD/SSM 167-19667-00033, and the appeal resolution 167-21410-00033 for the issued SPM 167-19669-00033, by incorporating the changes to the conditions appealed from these permits. (additions are **bolded** and deletions are struck-through for emphasis)

Upon further review, IDEM has decided to include the following updates to the Part 70 permit to further address and clarify the "PermitTerm".

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)]

- (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.

The "Term of Conditions" has been added in the Part 70 permit. Subsequent conditions have been re-numbered accordingly:

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

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.

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been removed. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has revised Section B – Preventive Maintenance, and has amended the Section B – Emergency Provisions condition as follows:

B.11 12 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]

- (a) If required by specific condition(s) in Section D of this permit, tThe Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility: 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 Permittees 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 3rd 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) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) (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 PMPs does not require the certification by the **I** responsible official@as defined by 326 IAC 2-7-1(34).
- (d) (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 13 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: 317-233-5674 (ask for Compliance Section) Facsimile Number: 317-233-5967

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 3rd 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 **A**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.

IDEM has clarified the following conditions B.14, now B.15; B.17, now B.18; and B.20, now B.21 as follows:

B.14-15 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (a) All terms and conditions of previous 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.

by this permit.

(b) **Provided that all terms and conditions are accurately reflected in this combined permit**, A-all previous registrations and permits are superseded by this **combined new source review and Part 70 operating** permit.

B.17 18 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 **I**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 3rd Street Terre Haute, Indiana 47807

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

- (1) A timely renewal application is one that is:
- (A) (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(a)

- (B) (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.
- (2) If IDEM, OAQ, and VCAPC upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] 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.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

- 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 emissions allowable under 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 3rd 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, on a rolling five (5) year basis, all such changes and emissions trading trades that are subject to 326 IAC 2-7-20(b), (c), or (e). and makes 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 **I**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 in emissions in 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.

IDEM has deleted Condition C.5 Operation of Equipment, as it is no longer applicable.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

- C.12 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6] Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ and VCAPC of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within Inormal@parameters and no response steps are required.

- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.
- (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.

The General Record Keeping and Reporting Requirements have been changed to reflect the new source review reform provisions at major sources.

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 2-3-1 (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] [26 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 **I**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 3rd 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 **I**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.

Nine (9) in-line presses, E2, E12, E13, E20 E22, E23, E5, E15, and E31 were deleted in Section A.2, because they have been removed from operation.

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) through (15) no change

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

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

- (28) Flexographic printing press, identified as press #32, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (29) Flexographic printing press, identified as press #33, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (30) Flexographic printing press, identified as press #34, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (31) Flexographic printing press, identified as press #35, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (32) Flexographic in-line printer attached to extruder #11, identified as E-11, using no control, and primarily exhausting to stack 111.
- (33) Flexographic printing press, identified as press #36, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (34) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (35) Flexographic printing press, identified as press #38, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12**, and/or 12 **13**.
- (36) Closed Solvent Spray type parts washer exhausting to stack 20.
- (37) Cyrel plate making facility exhausting to stack 23.
- (38) Four (4) Catalytic Oxidizers identified as I1 through I4 and exhausting through Stacks S1 through S4, each with a maximum heat input capacity of 3.0 million British thermal units per hour (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from presses #11 through #18.

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

- (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

#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) Flexographic in-line portable printer attached to extruder #2, identified as E2, installed in 1979, using no control, and exhausting to stack 102.
- (48) Flexographic in-line portable printer attached to extruder #5, identified as E5, installed in 1988, using no control, and exhausting to stack 105.
- (49) Flexographic in-line portable printer attached to extruder #12, identified as E12, installed in 1979, using no control, and exhausting to stack 112.
- (50) Flexographic in-line portable printer attached to extruder #13, identified as E13, installed in 1979, using no control, and exhausting to stack 113.
- (51) Flexographic in-line portable printer attached to extruder #15, identified as E15, installed in 1988, using no control, and exhausting to stack 115.
- (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.
- (52 48) Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.
- (53-49) Flexographic in-line portable printer attached to extruder #18, identified as E18, installed in 1986, using no control, and exhausting to stack 118.
- (54-50) Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.
- (55) Flexographic in-line portable printer attached to extruder #20, identified as E20, installed in 1980, using no control, and exhausting to stack 120.
- (56) Flexographic in-line portable printer attached to extruder #22, identified as E22, installed in 1986, using no control, and exhausting to stack 122.
- (57) Flexographic in-line portable printer attached to extruder #23, identified as E23, installed in 1986, using no control, and exhausting to stack 123.
- (58) Flexographic in-line portable printer attached to extruder #31, identified as E31, installed in 1990, using no control, and exhausting to stack 131.
- (59-51) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack

241.

- (60-52) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- (61-53) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- (62-54) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.
- (63-55) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.
- (64-56) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.
- (65-57) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.
- (66-58) Storage tank for hazardous waste storage of ink, identified as T8, capacity of 6,000 gallons, exhausting to stack 248.

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) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.
- (6) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.
- (7) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.
- (37) Cyrel plate making facility exhausting to stack 23.
- (59 51) Storage tank for reclaim solvent blend, identified as T1, capacity of 10,000 gallons, exhausting to stack 241.
- (60 52) Storage tank for slow solvent blend, identified as T2, capacity of 10,000 gallons, exhausting to stack 242.
- (61 53) Storage tank for fast solvent blend, identified as T3, capacity of 10,000 gallons, exhausting to stack 243.
- (62 54) Storage tank for hazardous waste storage of ink, identified as T4, capacity of 6,000 gallons, exhausting to stack 244.

63 55) Storage tank for reclaim solvent blend, identified as T5, capacity of 10,000 gallons, exhausting to stack 245.

(64 56) Storage tank for slow solvent blend, identified as T6, capacity of 10,000 gallons, exhausting to stack 246.

(65 57) Storage tank for fast solvent blend, identified as T7, capacity of 10,000 gallons, exhausting to stack 247.

(66 58) 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.)

Presses #19 - #35 were moved from Section D.3 to Section D.2, and presses #13 - # 18 were moved from Section D.2 to Section D.5 since all these presses are subject to the PSD review. Also, the catalytic oxidizers I5 through I12 will be moved from Section D.3 to Section D.2, to be grouped with the presses being controlled. All PSD conditions in this Section D.2 had considered the issues in the three outstanding appeals:

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (10) Flexographic printing press, identified as press #13, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (11) Flexographic printing press, identified as press #14, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (12) Flexographic printing press, identified as press #15, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (13) Flexographic printing press, identified as press #16, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (14) Flexographic printing press, identified as press #17, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (15) Flexographic printing press, identified as press #18, using catalytic oxidation for control, and exhausting to stacks 1, 2, 3, and/or 4.
- (16) 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) 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) 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) 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) 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) 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) 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) 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) 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) 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) 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) Flexographic printing press, identified as press #31, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (28) Flexographic printing press, identified as press #32, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (29) Flexographic printing press, identified as press #33, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (30) Flexographic printing press, identified as press #34, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (31) Flexographic printing press, identified as press #35, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, and/or 13.
- (38) Four (4) Catalytic Oxidizers identified as I1 through I4 and exhausting through Stacks S1 through S4, each with a maximum heat input capacity of 3.0 million British thermal units per hour (mmBtu/hr) are interconnected to form an oxidation control system capable of controlling emissions from Presses #11 through #18. (Note: Each individual oxidizer is only capable of handling air flow from two of the eight presses at a time.)
- (39) Catalytic Oxidizer, identified as I5, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 5.
- (40) Catalytic Oxidizer, identified as I6, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 6.
- (41) Catalytic Oxidizer, identified as I7, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 7.
- (42) Catalytic Oxidizer, identified as I8, with a maximum air flow rate of 8500 CFM, and a maximum heat input rating of 2.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through

#25 and #27 through #38, and exhausting to stack 8.

- (43) Catalytic Oxidizer, identified as I9, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 9.
- (44) Catalytic Oxidizer, identified as I10, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 10.
- (45) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11.
- (46) Catalytic Oxidizer, identified as I12, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12.
- (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 Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compound (VOC) [326 IAC 2-2]

(a)

- Pursuant to Construction Permit PC-84-1669, issued on November 25, 1987, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #13, Press #14, Press #15, and Press #16 combined shall be limited such that the potential to emit does not exceed 94 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: (VOC usage) * (1 - overall control efficiency) # 94 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 72.2% for VOC emissions from Press #13, Press #14, Press #15, and Press #16.
- (b) Pursuant to Construction Permit PC-84-1842, issued on April 6, 1990, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #17 and Press #18 shall be limited such that the potential to emit does not exceed 39.9 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: (VOC usage) * (1 - overall control efficiency) # 39.9 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 72.2% for VOC emissions from Press #17 and Press #18.

The Permit Shield provided by Condition B.13 of this permit does not apply to these emission units (Presses #17 and #18) with regard to 326 IAC 2-2 (PSD).

- 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 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%.
 - (b) The capture system for presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 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) and are not included in the calculation in (D) 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), in combination with the catalytic/regenerative thermal oxidation systems, 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 through I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

The source has appealed the Preventive Maintenance Plan condition in all SECTION Ds. Therefore, D.2.3 and all conditions in SECTION Ds with the PMP provisions have been deleted and a general condition has been included in SECTION B which will apply to the entire source. Subsequent conditions have been re-numbered accordingly:

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

IDEM has determined that once per Title V permit term is sufficient for periodic retesting of the control device efficiency, except when re-configuration in the design of the presses is made. The permit has been modified to reflect this change as follows:

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- *(a) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.1 and D.2.2, the Permittee shall perform VOC capture efficiency tests on each of these printing presses (Press #13, Press #14, Press #15, Press #16, Press #17, and Press #18) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C- Performance Testing.
 - (b) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.1 and D.2.2, the Permittee shall perform VOC destruction efficiency tests on each of these catalytic oxidizers (Unit 1, Unit 2, Unit 3, and Unit 4) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C-Performance Testing.

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

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 Condition D.2.1 utilizing methods as approved by the Commissioner. 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.

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 Condition D.2.1 utilizing methods as approved by the Commissioner. The capture efficiency test shall only 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 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.

Testing shall be conducted in accordance with Section C - Performance Testing.

Condition D.2.5 is no longer necessary as the limits in the original Condition D.2.1 are no longer applicable, since the presses are going through PSD review.

D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

- (a) Compliance with the VOC limitations contained in Condition D.2.1 shall be determined by tracking all VOC input (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 ganged catalytic oxidizer system (Unit 1, Unit 2, Unit 3, and Unit 4) to achieve compliance with conditions D.2.1 and D.2.2.

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

D.2.6 Catalytic Oxidizer Requirements

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on each catalytic oxidizer (Unit 1, Unit 2, Unit 3, and Unit 4) for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan B Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of any catalytic oxidizer is below 550°F. A three (3) hour average temperature that is below 550°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.2.1. and D.2.2, as approved by IDEM and VCAPC.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records and Reports whenever the three (3) hour average temperature of and catalytic oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

D.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). 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 the sixteen (16) printing presses (presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35) 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
l8 l12	600
l13	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 compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average operating the 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.

The identification used in the original Part 70 for the oxidizers has been changed to be consistent throughout the permit.

D.2.75 Oxidizer Ganging Grouping

(a)

- Oxidizers Unit I1, Unit I2, Unit I3, and Unit I4, are each designed to handle 7250 acfm of solvent laden air. These oxidizers are considered to be combined with the following restrictions:
 - (a) Before any of the affected presses (Presses #13 through #18) can operate, one oxidizer shall be warmed up, and operational;
 - (b) Presses #13 through #18 are each rated at 3500 acfm. The combined airflow (acfm, using the rated capacities) of all the presses in operation shall not exceed the combined rated airflow (acfm) of the oxidizers that are in operation at any time.
- (c) In the event that the currently operating oxidizers are at their maximum input airflow, one (1) additional oxidizer shall be warmed up and on standby (if available).
 - (d) In the event that an oxidizer fails, for any reason, the presses that oxidizer was handling shall immediately be shut down or diverted to an operating oxidizer with sufficient capacity to accommodate the diverted press(es). Any press shut down in this fashion can be restarted as soon as additional oxidation capacity is brought online or by shutting other presses down.
 - (e) A log of all such occurrences 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 a description of the corrective action(s).

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 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 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) 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.2.6 Parametric Monitoring [326 IAC 2-2]

- (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, and #35:

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

Indicator #1	Indicator #2	Indicator # 3
Work Practice	Work Practice	Pressure differential
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.
An excursion is identified as any finding that the integrity of the bypass	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
damper, the exhaust system ductwork, or the enclosure has been compromised.		(-)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.
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.
	Work Practice 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. An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised. Each excursion triggers an assessment of the problem, corrective action and a	Work PracticeWork PracticeInspect 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.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.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.

		Indicator #1	Indicator #2	Indicator # 3
Α.	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.	pressure differential at the interface between the wall of
В.	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. I	ndicator	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.		Determine the catalyst activity level by evaluating the conversion efficiency.
11.	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.	structural integrity of the oxidizer has been	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.
Ш.	Performance Criteria				
Α.	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.

		Indicator #1	Indicator #2	Indicator #3	Indicator #4
В.	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 <u>+</u> 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.
	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 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.	
	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.
11.	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.

		Indicator #1	Indicator #2	Indicator #3
Α.	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°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.
В.	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 <u>+</u> 20°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.	another test is conducted. Maintain records of corrective actions taken in
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	Qurterly	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) presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, and #35 six (6) printing presses (Press #13, Press #14, Press #15, Press #16, Press #17 and Press #18). The Compliance Response Plan shall be followed whenever. 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 violation deviation of from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the four (4) eight (8) catalytic oxidizers (Unit 1, Unit 2, Unit 3, and Unit 4, 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. The Compliance Response Plan shall be followed whenever 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 Exceedances. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a violation deviation of from this permit.

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

Original Condition D.2.9 has been deleted, because the limits in the original condition D.2.1 are no longer applicable.

D.2.9 Record Keeping Requirements

- (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 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).
- (a) To document compliance with Condition D.2.1, 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.2.1.

- (1) The VOC content of each coating material and solvent used.
- (2) The amount of coating material and solvent, used for each press 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 (by press) using methods identified in conditions D.2.1 and D.2.5.
- (b) To document compliance with Condition D.2.6 and Condition D.2.7, records of each press and each oxidizer operating times shall be kept. These records shall be in a format sufficient to demonstrate compliance with the minimum three (3) hour average temperature, and shall also include a specific listing of times that printing operations were interrupted (including the reasons) due to oxidizer related problems.
- (c) To document compliance with Condition D.2.8, 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).
- (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).
- (**d c**) All records shall be maintained in accordance with the Part 70 Section C General Record Keeping Requirements.

Condition D.2.10 has been deleted because the presses in this section were subject to PSD and the limits are not longer applicable:

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 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 **I**responsible official@as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

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

(30) Flexographic printing press, identified as Press 34, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12. (31) Flexographic printing press, identified as Press 35, using catalytic oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, and/or 12. (33)Flexographic printing press, identified as press #36, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12 and/or 12 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 110, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 10. (45) Catalytic Oxidizer, identified as I11, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 11. (46)Catalytic Oxidizer, identified as 112, with a maximum air flow rate of 12750 CFM, and a maximum heat input rating of 4.5 million BTU per hour for the supplemental fuel, capable of controlling presses #19 through #25 and #27 through #38, and exhausting to stack 12. (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.)

(a)

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

Condition D.3.1, D.3.2(a) through (g) have been deleted, because they are no longer applicable, since the presses are now subject to PSD review.

D.3.1 VOC Emissions [326 IAC 2-2-3] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]

The IDEM and VCAPC have information that indicates that these emission units (Press #23, Press #24, and Press #25) are subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided by Condition B.13 of this permit does not apply to these emission units (Press #23, Press #24, and Press #25) with regards to 326 IAC 2-2 (PSD). The OAQ and VCAPC will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements.

D.3.2-1 Volatile Organic Compounds (VOC) [326 IAC 2-2]

- Pursuant to Construction Permit CP-84-1896, issued on November 10, 1990, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #19 and Press #20 combined shall be limited such that the potential to emit does not exceed 39.9 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: (VOC usage) * (1 overall control efficiency) # 39.9 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 80.75% for VOC emissions from Press #19 and Press #20, and
- (b) Pursuant to Construction Permit CP-167-2146, issued October 22, 1991, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #21 and Press #22 combined shall be limited such that the potential to emit does not exceed 39.9 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: (VOC usage) * (1 overall control efficiency) # 39.9 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 80.75% for VOC emissions from Press #21 and Press #22.
- (c) Pursuant to Construction Permit CP-167-3392-00033, issued on April 11, 1994, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #23, Press #24, and Press #25 combined shall be limited such that the potential to emit does not exceed 74.1 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: (VOC usage) * (1 - overall control efficiency) # 74.1 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 80.75% for VOC emissions from Press #23, Press #24 and Press #25.
- (d) Pursuant to Construction Permit CP-167-V014-00033, issued on May 30, 1997, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #27, Press #28, Press #29, and Press #30 combined shall be limited such that the potential to emit does not exceed 38.8 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: (VOC usage) * (1 - overall control efficiency) # 38.8 tons. Therefore the

requirements of 326 IAC 2-2 (PSD) are not applicable; and

- (2) The Permittee shall maintain a minimum overall control efficiency of 95% for VOC emissions from Press #27, Press #28, Press #29 and Press #30.
- (c) Pursuant to Significant Source Modification 167-11568-00033, issued on February 1, 2000, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #31 and Press #32 combined shall be limited such that the potential to emit does not exceed 19.32 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: (VOC usage) * (1 overall control efficiency) # 19.32 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 95% for VOC emissions from Press #31 and Press #32.
- (f) Pursuant to SSM 167-12790-00033, issued on January 23, 2001, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #34 and Press #35 combined shall be limited such that the potential to emit does not exceed 16.85 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: (VOC usage) * (1 overall control efficiency) # 16.85 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 95% for VOC emissions from Press #34 and Press #35.
- (g) Pursuant to SSM 167-16521-00033, issued on April 10, 2003, and revised through this Part 70 permit, the following conditions apply:
 - (1) The annual VOC input to Press #33 shall be limited such that the potential to emit does not exceed 9.72 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: (VOC usage) * (1 - overall control efficiency) # 9.72 tons. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable; and
 - (2) The Permittee shall maintain a minimum overall control efficiency of 95% for VOC emissions from Press #33.
- (h) Pursuant to SSM 167-18122-00033, issued on May 3, 2004, and revised through this Part 70 permit, the following conditions apply:
 - (1) (a) The annual VOC input usage to on Ppress #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 Therefore the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) are not applicable.
 - (2) (b) Whenever Ppress #36 is applying VOC containing materials, the press exhaust shall be vented through the operating oxidation control system. The Permittee press shall maintain a minimum overall control efficiency of 80.75% for VOC emissions from Press #36.

Press #20, Press #21, Press #22, Press #23, Press #24, Press #25, have been deleted from Condition D.3.3, now D.3.2 because these presses have been moved to Section D.2.

D.3.3 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 eight (8) printing presses (Press #19, Press #20, Press #21, Press #22, Press #23, Press #24, Press #25, and Ppress #36), in combination with the catalytic/regenerative thermal oxidation systems, 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(e)(3), the VOC capture systems on the nine (9) printing presses (Press #27, Press #28, Press #29, Press #30, Press #31, Press #32, Press #33, Press #34 and Press #35), in combination with the catalytic oxidation systems, shall be operated in such a manner to attain and maintain a minimum 60% overall control efficiency for flexographic printing.
- (c) Pursuant to 326 IAC 8-5-5(c)(3)(B), the eight (8) catalytic oxidizers (Unit I5 through I12, Unit 6, Unit 7, Unit 8, Unit 9, Unit 10, Unit 11, and Unit I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

Condition D.3.4 has been deleted since a general language in Section C has been added.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

Oxidizers I5 through I12 are controlling Press #36. The capture efficiency on Press #36 has been performed on October 27, 2004. Bemis indicated that the destruction efficiency testing for oxidizers I5 through I12 has been scheduled before the issuance of this SPM 167-21257-00033. Therefore, retesting of these press and oxidizers shall be as follows:

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

- (a) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC capture efficiency tests on each of these printing presses (Press #19, Press #20, Press #21, Press #22, Press #23, Press #24, and Press #25) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC capture efficiency tests on each of these printing presses (Press #27, Press #28, Press #29, Press #30, Press #31, Press #32, Press #33, Press #34, and Press #35) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C- Performance Testing.
- (c) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC capture efficiency tests on Press #36 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C- Performance Testing.
- (d) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC destruction efficiency tests on each of

these catalytic oxidizers (Unit I5 and Unit I6) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 **2**) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C-Performance Testing.

- (c) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC destruction efficiency tests on each of these catalytic oxidizers (Unit I7 and Unit I8) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C Performance Testing.
- (f) Within the first thirty (30) months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform VOC destruction efficiency tests on each of these catalytic oxidizers (Unit 9, Unit 10, Unit 11 and Unit 12) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 2) years from the date of this valid compliance demonstration Testing shall be conducted in accordance with Section C-Performance Testing.

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. 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 October 27, 2004 for press #36, shall only 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) The addition of a print station to the 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.3.6 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. 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 ganged catalytic oxidizer system (Unit I5 through I13 Unit 6, Unit 7, Unit 8, Unit 9, Unit 10, Unit 11, and Unit 12) to achieve compliance with conditions D.3.1 and D.3.2.

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

The following requirements have been added for monitoring the Catalytic Oxidizer temperature:

- 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 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. A three (10) hour average operating temperature to take response steps in accordance with Section C – Response to Excursions or Exceedances steps in accordance with Section C – Response to Excursions or Exceedance steps in accordance with Section C – Response to Excursions or Exceedance steps in accordance with Section C – Response to Excursions 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
I8, I12	600
l13	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 compliant performance test. A three (3) hour average operating temperature that is below the three (3) hour average temperature as observed during the 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.3.7 Catalytic Oxidizer Requirements

(a) The Permittee shall monitor Unit 5 and Unit 6 according to the following:

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

- Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

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

(c) The Permittee shall monitor Unit 9, Unit 10, Unit 11 and Unit 12 according to the following:

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

D.3.8 6 Oxidizer Ganging Grouping

Oxidizers Unit 9, Unit 10, Unit 11 and Unit 12, are each designed to handle 12, 750 acfm of solvent laden air. Oxidizers Unit 5, Unit 6, Unit 7 and Unit 8 are each designed to handle 8,500 acfm. These oxidizers are considered to be combined with the following restrictions:

- (a) Before any of the affected presses (Presses #19 through #25 and #27 through #36) can operate, one oxidizer shall be warmed up, and operational;
- (b) Presses #19 through #25 are each rated at 4250 acfm. Presses #27 through #35 are each rated at 6375 acfm. Press #36 is rated at 4000 acfm. The combined airflow (acfm, using the rated capacities) of all the presses in operation shall not exceed the combined rated airflow (acfm) of the oxidizers that are in operation at any time.
- (c) In the event that the currently operating oxidizers are at their maximum input airflow, one (1) additional oxidizer shall be warmed up and on standby (if available).
- (d) In the event that an oxidizer fails, for any reason, the presses that oxidizer was handling shall immediately be shut down or diverted to an operating oxidizer with sufficient capacity to accommodate the diverted press(es). Any press shut down in this fashion can be restarted as soon as additional oxidation capacity is brought online or by shutting other presses down.
- (e) A log of all such occurrences shall be kept and made available to Vigo County Air Pollution Control (VCAPC) and the Office of Air Quality (OAQ) upon request. The log shall contain, as a minimum, the date and time of the occurrence, a description of the occurrence, and a description of the corrective action(s).

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 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 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) 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.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) from the most recent performance test that demonstrates compliance with the limit in Condition D.3.1.
- (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 Unen	closed Presses
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	Indicator # 1	Indicator #2	Indicator #3ª
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: • between color dryer flow; and • tunnel oven flow.	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.

111.	Performance Criteria			
Α.	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.
в.	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	Maintain for a period of 5 years records of Inspections, including dates and initials of person conducting inspection, and of	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
		corrective actions taken in response to excursions.	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

^a 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	temperature	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				

		Indicator #1	Indicator #2	Indicator #3	Indicator #4
Α.	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.
В.	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 <u>+</u> 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.
	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.

(c) Monitoring Approach For The Regenerative Thermal Oxidizer:

		Indicator #1	Indicator #2	Indicator #3
I. I	Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
P	Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	

		Indicator #1	Indicator #2	Indicator #3
11.	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			
Α.	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°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.
В.	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 <u>+</u> 20°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.	another test is conducted. Maintain records of
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 IDEN at least 35 days prior to test date. Submit test report 45 days after conducting a performance test.

	Indicator #1	Indicator #2	Indicator #3
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

- (a) The Permittee shall conduct quarterly inspections of all components relating to the capture system of each of the sixteen (16) printing presses (Press #19, Press #20, Press #21, Press #22, Press #23, Press #24, Press #25, Press #27, Press #28, Press #29, Press #30, Press #31, Press #32, Press #33, Press #34, Press #35, and Press #36). press #36. The Compliance Response Plan shall be followed whenever 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 violation deviation of from this permit.
- (b) The Permittee shall also conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (Unit 5, Unit 6, Unit 7, Unit 8, Unit 9, Unit 10, Unit 11, and Unit 12-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. The Compliance Response Plan shall be followed whenever 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 violation deviation of 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

(a) To document compliance with Condition D.3.2-1, 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

complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.-2-1.

- (1) The VOC content of each coating material and solvent used.
- (2) The amount of coating material and solvent, used for each press.
 - (A) Records shall include purchase orders, invoices, material safety data sheets (MSDS) or any other available records sufficient to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (3) The total VOC usage for each month; and
- (4) The weight of VOCs emitted for each compliance period (by press) from press #36 using methods identified in conditions D.3.2 and D.3.6 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 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).
- (b) Daily record of (duct pressure, or fan amperage or differential pressure,
- (c) To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (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.
 - IDEM has clarified the following condition (Reporting Requirements):

D.3.11 Reporting Requirements

A quarterly monthly summary of the information to document compliance with Condition D.3.21 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 **A**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)]:

(32) Flexographic in-line portable printer attached to extruder #11, identified as E-11, using no control, and primarily exhausting to stack 111.

(47)	Flexographic in-line portable printer attached to extruder #2, identified as E2, installed in 1979, using no control, and exhausting to stack 102.
(48)	Flexographic in-line portable printer attached to extruder #5, identified as E5, installed in 1988, using no control, and exhausting to stack 105.
(49)	Flexographic in-line portable printer attached to extruder #12, identified as E12, installed in 1979, using no control, and exhausting to stack 112.
(50)	Flexographic in-line portable printer attached to extruder #13, identified as E13, installed in 1979, using no control, and exhausting to stack 113.
(51)	Flexographic in-line portable printer attached to extruder #15, identified as E15, installed in 1988, using no control, and exhausting to stack 115.
(52 48)	Flexographic in-line portable printer attached to extruder #17, identified as E17, installed in 1986, using no control, and exhausting to stack 117.
(53 49)	Flexographic in-line portable printer attached to extruder #18, identified as E18, installed in 1986, using no control, and exhausting to stack 118.
(5 4 50)	Flexographic in-line portable printer attached to extruder #19, identified as E19, installed in 1988, using no control, and exhausting to stack 119.
(55)	Flexographic in-line portable printer attached to extruder #20, identified as E20, installed in 1980, using no control, and exhausting to stack 120.
(56)	Flexographic in-line portable printer attached to extruder #22, identified as E22, installed in 1986, using no control, and exhausting to stack 122.
(57)	Flexographic in-line portable printer attached to extruder #23, identified as E23, installed in 1986, using no control, and exhausting to stack 123.
(58)	Flexographic in-line portable printer attached to extruder #31, identified as E31, installed in 1990, using no control, and exhausting to stack 131.
	formation describing the process contained in this facility description box is descriptive information and does not te enforceable conditions.)

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

D.4.1 Volatile Organic Compounds (VOC) use [326 IAC 2-2][326 IAC 8-5-5]

(a) The VOC delivered to in-line presses E5, E15, E17, E18, E19, E20, E22, E23, and E31 shall individually not exceed 25 tons per 12 consecutive month period with compliance demonstrated at the end of each month. This condition results in these presses not being subject to the provisions of 326 IAC 8-5-5 (Graphic Arts Operations).

The annual VOC usage on In-Line Press E19 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 E19 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).

(b) The annual VOC usage on In-Line Press E11 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 E11 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).

- (c) The annual VOC usage on In-Line Press E17 and In-Line Press 18 shall each 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 E17 and Press 18 not subject to 326 IAC 8-5-5 (Graphic Arts Operation).
- (d) The combined VOC usage on both In-Line Press E17 and In-Line Press 18 shall not exceed 39.9 tons per 12 consecutive month period with compliance determined at the end of each month. Compliance with this condition shall make these two in-line presses not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration.
- (b) Pursuant to SSM 167-11853-00033, the VOC delivered to in-line Press E11 shall not exceed 18 tons per 12 consecutive month period with compliance demonstrated at the end of each month. This condition results in the requirements of 326 IAC 2-2 (PSD) not being applicable to this press.
- VOC Emissions [326 IAC 2-2-3] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]

The IDEM and VCAPC have information that indicates that these emission units (E5, E15, E17, E18, E19, E22, E23, and E31) are subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided by Condition B.13 of this permit does not apply to these emission units (E5, E15, E17, E18, E19, E22, E23, and E31) with regards to 326 IAC 2-2 (PSD). The OAQ and VCAPC will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements.

Compliance Determination Requirements

D.4.2 Volatile Organic Compounds (VOC)

> Compliance with the VOC limitations contained in Conditions D.4.1 shall be determined by tracking all VOC input 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.

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

- **Record Keeping Requirements** D.4.3
 - To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) (a) 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.4.1.
 - The VOC content of each coating material and solvent used. (1)(2)
 - The amount of coating material and solvent, used for each press monthly.
 - Records shall include purchase orders, invoices, material safety data sheets (MSDS) or (A) any other available records sufficient to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3)The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period (by press) using methods identified in condition D.4.3. **D.4.2.**
 - All records shall be maintained in accordance with Section C General Record Keeping Requirements, of (b) this permit.

IDEM has clarified the following condition (Reporting Requirements):

D.4.54 Reporting Requirements

A quarterly monthly summary of the information to document compliance with Condition D.4.1 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 **l** responsible official@as defined by 326 IAC 2-7-1(34).

Presses #13 through #18 have been grouped with Presses #11 and #12 in the following Section D.5, since these presses are subject to PSD and controlled by the same catalytic oxidizers:

SECTION D.5 FACILITY OPERATION CONDITIONS

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

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

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 Press #11 or Press #12 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 Ppresses #11, and #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 flexographic printer identified as Ppresses #11 and through Press #12- #18 in conjunction combination with the catalytic oxidation systems shall be operated in such a manner to achieve a minimum of sixty percent (60%) overall control efficiency.
- (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the four (4) catalytic oxidizer (I1 through I4) shall maintain a minimum destruction efficiency of 90%.

The Permittee has requested to delete the following condition on Clean Units, since the Clean Unit portion of the New NSR Reform Rules has been remanded by the US District Court. Subsequent conditions have been renumbered accordingly:

- D.5.3 Clean Units [326 IAC 2-2.2]
 - (a) Pursuant to 326 IAC 2-2.2, Press #11 and Press #12 are designated as Clean Units for volatile organic compounds (VOC) emissions.
 - (b) The Clean Unit designation for Press #11 and Press #12 shall be in effect for ten (10) years from the date this PSD Permit No.: 167-19667-00033 is issued.

(c) In order to maintain the Clean Unit designation for Press #11 and Press #12:

- (1) the Permittee shall comply with the PSD BACT limit established for these presses and their VOC control systems found in Condition D.5.1.
- (2) no physical change or change in the method of operation shall be made for Press #11 and Press #12 that will allow them to be operated in a manner that is inconsistent with their original physical or operational characteristic.
- (3) the Permittee shall not replace the specific air pollution control technology with one that has a lower control efficiency than the original control that was established as BACT.
- (d) Any project at these presses for which actual construction begins after the effective date and before the expiration date of the clean units designation shall be considered to have occurred while the emissions units were clean units.
- (e) If a project at these emission units does not cause the need for a change in the emission limitations in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.
- (f) If a project causes the need for a change in the emission limitations in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.
- (g) The Emission limits required for Press #11 and Press #12 in conjunction with the PSD BACT shall stay the same upon expiration of the Clean Unit designation.
- (h) A change that causes emission units to lose their clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

Condition D.5.4 has been deleted since a general language in Section C was added.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

Oxidizers I1 through I4 are controlling Presses #11 through #18. Destruction efficiency testing on oxidizers I1 through I4 and capture efficiency testing for Presses #11 and #12 have been completed on June 30, 2005. Therefore, retesting of these oxidizers shall be made five (5) years from June 30, 2005. Presses #13 through #18 will be tested within sixty (60) days from the issuance of this permit.

D.5.53 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

Within sixty days (60) after the issuance of this permit, the Permittee shall conduct a performance test to verify VOC control efficiency, and the total enclosure as per Condition D.5.1 for the Catalytic Oxidizers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 ½) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Testing of the catalytic oxidizers (I1 through I4) to verify their destruction efficiencies was performed on June 27, 2005. The oxidizers' destruction efficiency testing shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

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) presses (presses #13, #14, #15, #16, #17, and #18) as per Condition D.5.1 utilizing methods as approved by the Commissioner. The capture efficiency test shall only 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 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.5.6-4 Thermal-Oxidizer Temperature [326 IAC 2-2]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating 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 (Ppresses #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 stack performance test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 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 (Press #11, #12, #13, #14, #15, #16, #17, and #18)Catalytic Oxidizers is below 550 °F. A three (3) hour average inlet temperature to the catalyst bed of average inlet temperature to the catalyst bed that is below 550 °F is not a deviation from this permit. 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 Part 70 Section C-Response to Excursions or Exceedances with Part 70 Section C-Response to Excursions or Exceedances Section C Preparation, Implementation, Records, and Reports 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 stack performance test that demonstrates compliance with limits in Condition D.5.1, as approved by IDEM.
- (c) On and after the date the approved stack performance test results are available, the Permittee shall take

appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports Response to Excursions or Exceedances whenever the 3-hour average temperature of the thermal oxidizer at the inlet to the catalyst bed of any catalytic oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack 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

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 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 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) 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

- (a) The Permittee shall determine establish the appropriate monitoring parameter for each press and value (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 limits in Condition D.5.1, as approved by IDEM.
- (b) The established permanent total enclosure monitoring parameter and value (duct pressure, or fan amperage or differential pressure) shall be observed at least once per day when Press #11 and Press #12 Catalytic Oxidizers are in operation. On and after the date the approved compliance demonstration results are available, the permanent total enclosure monitoring parameter shall be maintained within the normal range as established in most recent performance test.

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]

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:

	Indicator #1	Indicator #2	Indicator # 3
I. Indicator	Work Practice	Work Practice	Pressure differential
Measurement Approach	Inspect the operational condition of the control device bypass damper, the integrity of the exhaust system from the process to the control device, and the integrity of the enclosure.	Inspect operational condition of bypass damper position interlock.	Monitor pressure differential across the enclosure wall and the surrounding atmosphere.
II. Indicator Range	An excursion is identified as any finding that the integrity of the bypass damper, the exhaust system ductwork, or the enclosure has been compromised.	An excursion is identified as any finding that the bypass interlock is inoperative.	An excursion is defined as a pressure differential of less than negative (-)0.007" w.c. for 5 consecutive minutes while the process is operating; alternatively, a smaller differential (i.e., less than (-)0.007" w.c.) can be used a 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.

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

	Indicator #1	Indicator #2	Indicator # 3
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.
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.
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.

	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	structural integrity of the oxidizer has been	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
	demonstration, or as any 3-hour period when the average temperature is less than the average temperature demonstrated during the most recent compliance demonstration.	uesigneu.		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.

(b) Monitoring Approach For Catalytic Oxidizers

		In diantan #4	Indiantan #0	Indiantan #2	Indianten #4
А.	Data Representativeness	Indicator #1 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.	Indicator #2 Inspections of the oxidizer system will identify problems.	Indicator #3 A test protocol shall be prepared and approved by IDEM prior to conducting the performance test.	Indicator #4 Analysis will determine the conversion efficiency of the catalyst.
В.	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 <u>+</u> 20 ⁰ F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.
	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.

Compliance Monitoring Requirements

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 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.5.99 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 Press #11 and Press #12 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 stack 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).**
- (b) To document compliance with Condition D.5.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) (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)]

- (34) Flexographic printing press, identified as press #37, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12** and/or 12 **13**;
- (35) Flexographic printing press, identified as Ppress #38, using catalytic oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, **12** and/or 12 **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 I3.

(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)]

For consistency throughout the permit, the following changes have been to Condition D.6.1:

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]
 - Pursuant to SSM 167-21605-00033, issued on January 5, 2006, and revised through this Part 70 permit, the annual VOC input usage on Ppress #37 and Ppress #38 combined shall be less than 800 tons per twelve consecutive month period with compliance determined at the end of each month. This usage limit, in conjunction with the rest of this condition, is required to limit the potential to emit of VOC to less than 40 tons per consecutive month period. 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. Sompliance 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 these two presses not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration
 - (b) Whenever Ppress #37 or Ppress #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 Ppresses #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 limit condition shall makes 326 IAC 2-2 2-3(Emission Offset PSD) not applicable.

- D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]
 - (a) Pursuant to 326 IAC 8-5-5(e)(3), the capture system for the flexographic printers identified as Ppress #37 and Ppress #38 in conjunction combination with the catalytic/regenerative thermal oxidation systems shall be operated in such a manner to achieve a minimum of sixty percent (60%) overall control efficiency.
 - (b) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5 through I12) and regenerative thermal oxidizer (I13) shall maintain a minimum destruction efficiency of 90%.

Condition D.6.3 has been deleted since a general language in Section C was added. Subsequent conditions have been re-numbered accordingly.

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

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

IDEM has changed the frequency of the stack test from every 2 ½ years to every 5 years. This frequency was based from the "Technical Support Document (TSD) for Title V Permitting of Printing Facilities," published by OAQPS, EPA on January 2005.

Compliance Determination Requirements

D.6.4-3 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Within sixty (60) days after achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify compliance with the overall VOC

control efficiency (including capture and destruction efficiency) requirement in Condition D.6.1 for the Catalytic Oxidizers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 ½) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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. 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 only 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.

The following condition has been added in the permit to clarify the method used to comply with the VOC limit in Condition D.6.1:

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

- (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 Thermal Oxidizer Temperature
 - A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating (a) temperature of each catalytic oxidizer in the control system used to control emissions from Ppress #37 and **Pp**ress #38. For the purpose of this condition, continuous means no less than once per minute, the operating temperature for the catalytic oxidizers (15 through 112) 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 stack performance test results are available, the Permittee shall take appropriate response steps in accordance with Part 70 Section C – Compliance Response Plan - Preparation, Implementation, Records and Reports Response to Excursions or Exceedances whenever the three (3) hour average operating temperature of any oxidizer in the control system of any catalytic oxidizer in the control system used to control emissions from Ppress #37 and Ppress #38 is below the corresponding temperature values 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 Part 70 Section C -- Compliance Response Plan -Preparation, Implementation, Records and Reports Response to Excursions or Exceedances shall be considered a deviation from this permit.

Oxidizer ID	Minimum 3-hour Average
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	Temperature (°F)
Unit 5, Unit 6, Unit 9, Unit 10 I5,	550
I6, I7, I9, I10, I11	
Unit 7, Unit 8 18, 112	650-600
Unit 11, Unit 12 I13	500 -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 stack 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 of the thermal oxidizer is below the three (3) hour average inlet temperature as observed during the compliant stack performance test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack 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.

The following condition has been added in the 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 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 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) 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.

The Permittee has made changes to the CAM for Presses #37 and #38:

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
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	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
		damper, the exhaust system ductwork, or the enclosure has been compromised.		(-)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			
Α.	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.	pressure differential at the interface between the wall of
В.	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.

		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.		Determine the catalys activity level by evaluating the conversion efficiency.
II. Indicator Range	temperature	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°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.

		Indicator #1	Indicator #2	Indicator #3	Indicator #4
C.	QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria <u>+</u> 20 ⁰ F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually Internal inspection – annually. 	Once every five years.	Annually.
	Data Collection Procedure	Recorded at least every 15-minutes on a chart or electronic media.	Record results of inspections and observations.	Per approved test method.	Record results of catalyst sample analyses.
	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.

		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.
11.	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.
		Indicator #1	Indicator #2	Indicator #3
III.	Performance Criteria			
Α.	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°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.
В.	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) Monitoring Approach For The Regenerative Thermal Oxidizer:

		Indicator #1	Indicator #2	Indicator #3
C.	QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria <u>+</u> 20°F.	Not applicable.	EPA test methods approved in protocol.
D.	Monitoring Frequency	Measured continuously	 External inspection – annually. 	Once every five years.
			 Internal inspection – 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.
	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.	another test is conducted. Maintain records of
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 (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 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.6.7-10Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.6.1.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent, used for each press.
 - (A) Records shall include purchase orders, invoices, material safety data sheets (MSDS) or any other available records sufficient to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period (by press) 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.6.5 **4** and D.6.**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).
 - (c) To document compliance with Condition D.6.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan. 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 **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 **A**responsible official@as defined by 326 IAC 2-7-1(34).

SECTION D.7 and SECTION D.8. There have been no changes made to these sections.

The *limits* for presses #13 through #35 are no longer applicable, as these presses are now being reviewed under PSD. Therefore, the following report forms will be deleted.

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:	<u>1350 North Fruitridge Ave., Terre Haute, Indiana 47804</u>
Mailing Address:	PO Box 905, Terre Haute, Indiana 47808
Part 70 Permit No .:	<u> </u>
Facility:	Press #13, Press #14, Press #15, and Press #16
Parameter:	VOC emission
Limit:	Combined emission less than 94 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: _____YEAR: _____YEAR: _____

	Press #13, Press #14, Press #15, and Press #16 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

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.:	<u>T167-6182-00033</u>
Facility:	Press #17 and Press #18
Parameter:	VOC emission
Limit:	Combined emission less than 39.9 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: _____YEAR: _____

	Press #17 and Press #18 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this guarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

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:	Press #19 and Press #20
Parameter:	- VOC emission
Limit:	Combined emissions less than 39.9 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: _____YEAR: _____

	Press #19 and Press #20 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
olghatare.	
Data:	
Phone:	
r none.	

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:	Press #21 and Press #22
Parameter:	- VOC emission
Limit:	Combined emissions less than 39.9 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: ______YEAR: _____

	Press #21 and Press #22 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
olghatare.	
Data:	
Phone:	
FHOHE.	

VIGO COUNTY AIR POLLUTION CONTROL

Part 70 Quarterly Report

Source Name:	Bemis Company, Inc.
Source Address:	<u>1350 North Fruitridge Ave., Terre Haute, Indiana 47804</u>
Mailing Address:	PO Box 905, Terre Haute, Indiana 47808
Part 70 Permit No .:	<u>T167-6182-00033</u>
Facility:	Press #23, Press #24, and Press #25
Parameter:	VOC emission
Limit:	Combined emissions less than 74.1 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: YEAR:

	Press #23, Press #24, Press #25, and Press #26 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	· · · · · · · · · · · · · · · · · · ·
Phone:	

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 .:	<u>T167-6182-00033</u>
Facility:	Press #27, Press #28, Press #29, and Press #30
Parameter:	VOC emission
Limit:	Combined emissions less than 38.8 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER:_____YEAR:_____

	Press #27, Press #28, Press #29, and Press #30 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Date:	
Phone:	
Signature: Date: Phono:	

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.:	<u> </u>
Facility:	Press #31 and Press #32
Parameter:	- VOC emission
Limit:	Combined emissions less than 19.32 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: _____YEAR:_

	Press #31 and Press #32 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
-	
Date:	· · · · · · · · · · · · · · · · · · ·
Phone:	

VIGO COUNTY AIR POLLUTION CONTROL

Part 70 Quarterly Report

Source Name:	Bemis Company, Inc.
Source Address:	<u>1350 North Fruitridge Ave., Terre Haute, Indiana 47804</u>
Mailing Address:	PO Box 905, Terre Haute, Indiana 47808
Part 70 Permit No .:	<u> </u>
Facility:	Press #34 and Press #35
Parameter:	VOC emission
Limit:	Combined emissions less than 16.85 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: YEAR:

	Press #34 and Press #35 Combined		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
-	
Date:	
Phone:	

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

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:

Bemis Company, Inc. 1350 North Fruitridge Ave., Terre Haute, Indiana 47804 PO Box 905, Terre Haute, Indiana 47808 T167-6182-00033 In-line Presses E5, E15, E11, E17, E18, E19, E20, E22, E23, and E31 VOC usage from E11, E17, E18, and E19 shall be limited as follows: E11 - not to exceed 24.9 tons per 12 consecutive month period, E17 - not to exceed 24.9 tons per 12 consecutive month period, E18 - not to exceed 24.9 tons per 12 consecutive month period, E19 - not to exceed 24.9 tons per 12 consecutive month period

E17 & E18 combined limit - not to exceed 39.9 tons per 12 consecutive month period

Compliance from all limits shall be determined at the end of each month

	QUARTE	ER:YEAF	R:			
Month	PRESS ID	E11	E17	E18	E19	Combined Total for E17 & E18
	Tons VOC Input This Month					
Month 1	Tons VOC Input Past 11 Months					
	Tons VOC Input 12 Month Total					
Month 2	Tons VOC Input This Month					
	Tons VOC Input Past 11 Months					
	Tons VOC Input 12 Month Total					
Month 3	Tons VOC Input This Month					
	Tons VOC Input Past 11 Months					
	Tons VOC Input 12 Month Total					

9 9 No deviation occurred in this guarter.

Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	

Phone:

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 input
Limit:	Input less than 18 tons per 12 consecutive month period with compliance demonstrated at the end
	of each month.

QUARTER: YEAR:

	In-line press E11		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
-	
Date:	
Phone:	

VIGO COUNTY AIR POLLUTION CONTROL

Part 70 Quarterly Report

Source Name:	Bemis Company, Inc.
Source Address:	<u>1350 North Fruitridge Ave., Terre Haute, Indiana 47804</u>
Mailing Address:	PO Box 905, Terre Haute, Indiana 47808
Part 70 Permit No.:	T167-6182-00033
Facility:	Press #33
Parameter:	- VOC emission
Limit:	Combined emissions less than 9.72 tons per 12 consecutive month period with compliance
	demonstrated at the end of each month.

QUARTER: YEAR:

	Press #33		
Month	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total

9 - No deviation occurred in this quarter.

9 Deviation/s occurred in this guarter. Deviation has been reported on:

Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

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:	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:_____

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

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

Submitted by:	
Title / Position:	

Signature:

Date:

Phone:

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:	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	Tons VOC this month	Tons VOC past 11 months	Tons VOC 12 month total
1			
2			
3			

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

Submitted by:	
Title / Position:	

Signature:

Date:

Phone:

Conclusion

The operation of Presses #11 and #12 shall be subject to the conditions of the attached PSD Significant Source Modification 167-20981-00033 and Significant Permit Modification 167-21257-00033. The staff recommends to the Commissioner that this PSD Significant Source Modification 167-20981-00033 and Significant Permit Modification 167-21257-00033 be approved.