INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To:	Interested Parties
Date:	March 5, 2015
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	Bemis Company Inc.
Permit Level:	Title V – Significant Source Modification
Permit Number:	167-34018-00033
Source Location:	1350 Fruitridge Ave. Terre Haute, Indiana
Type of Action Taken:	Modification at an existing source

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 matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, select Search option 3, then enter permit 34018.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

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.

(continues on next page)

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, Suite N 501E, 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.

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Mr. Lukas J. Hendrix
Bemis Company, Inc.
1350 Fruitridge Avenue
Terre Haute, IN 47804

March 5, 2015

Re: 167-34018-00033
Significant Source Modification

Dear Mr. Hendrix:

Bemis Company, Inc. was issued Part 70 Operating Permit Renewal No.: T167-27050-00033 on October 28, 2009 for a stationary polyethylene film plant including film production, printing, and converting operations located at 1350 Fruitridge Avenue, Terre Haute, IN 47804. An application to modify the source was received on December 23, 2013. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission unit is approved for construction at the source:

(jj) Photopolymer plate making facility, identified as Cyrel, constructed in 1992, and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14.

The following construction conditions are applicable to the proposed modification:

1. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

2. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

3. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Approval to Construct

4. For the purposes of this permitting action, the Significant Permit Modification has been combined with the current Part 70 Operating Permit Renewal.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm

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, please contact Deena Patton of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Deena Patton or extension 4-5400 or dial (317) 234-5400.

Sincerely,

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Vigo County
Vigo County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

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Commissioner

Significant Source Modification to a Part 70 Source

OFFICE OF AIR QUALITY

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 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: T167-34018-00033	
Issued by: Tripurari Sinha Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: March 5, 2015

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SECTION A SOURCE SUMMARY

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

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

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

Source Address:	1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
General Source Phone Number:	(812) 460-6200
SIC Code:	2673, 3081
County Location:	Vigo
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Minor Source under Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.

(b) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.

(c) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.

(d) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.

(e) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.

(f) Flexographic printing press, identified as press #11, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(g) Flexographic printing press, identified as press #12, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(h) Flexographic printing press, identified as press #13, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(i) Flexographic printing press, identified as press #14, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(j) Flexographic printing press, identified as press #15, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(k) Flexographic printing press, identified as press #16, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(l) Flexographic printing press, identified as press #17, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(m) Flexographic printing press, identified as press #18, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(n) Flexographic printing press, identified as press #19, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(o) Flexographic printing press, identified as press #20, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(p) Flexographic printing press, identified as press #21, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(q) Flexographic printing press, identified as press #22, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(r) Flexographic printing press, identified as press #23, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14..

(s) Flexographic printing press, identified as press #24, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(t) Flexographic printing press, identified as press #25, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(u) Flexographic printing press, identified as press #27, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(v) Flexographic printing press, identified as press #28, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(w) Flexographic printing press, identified as press #29, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(x) Flexographic printing press, identified as press #30, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(y) Flexographic printing press, identified as press #31, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(z) Flexographic printing press, identified as press #32, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(aa) Flexographic printing press, identified as press #33, constructed in 2003, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(bb) Flexographic printing press, identified as press #36, constructed in 2004, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(cc) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(dd) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ee) Flexographic printing press, identified as press #39, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ff) Flexographic printing press, identified as press #40, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(gg) Flexographic printing press, identified as press #41, constructed in 2012, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(hh) Flexographic printing press installed in a Permanent Total Enclosure, identified as press #42, constructed in 2014, using oxidation for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

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

(jj) Photopolymer plate making facility, identified as Cyrel, constructed in 1992, and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14.

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36 #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 14.

(uu) Regenerative thermal oxidizer, identified as I15, with a maximum air flow rate of 40,000 CFM, and a maximum heat input rating of 7.3 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17, and/or #18, and exhausting to stack 15.

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

This stationary source does not include any insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 6.5-1]

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T009-27050-00004, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(d) 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.11 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, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 a certification that meets the requirements of 326 IAC 2-7-6(1) by 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 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 by 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.

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

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including

the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T009-27050-00004 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes 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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a

Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

(c) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V

Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

Such records shall consist of all information required to be submitted to IDEM, OAQ 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, 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.

(f) This condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the

appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.9 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

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

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

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

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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; and/or

(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 record the reasonable response steps taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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. Support information includes the following, where applicable:
  (AA) All calibration and maintenance records.
  (BB) All original strip chart recordings for continuous monitoring instrumentation.
  (CC) Copies of all reports required by the Part 70 permit.

  Records of required monitoring information include the following, where applicable:
  (AA) The date, place, as defined in this permit, and time of sampling or measurements.
  (BB) The dates analyses were performed.
  (CC) The company or entity that performed the analyses.
  (DD) The analytical techniques or methods used.
  (EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) 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

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) 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 (ww) and/or 326 IAC 2-3-1 (pp), 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).

(f) The report for project at an existing emissions unit shall be submitted no later than 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 (d)(1) and (2) 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 wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS:

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

(f) Flexographic printing press, identified as press #11, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(g) Flexographic printing press, identified as press #12, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(h) Flexographic printing press, identified as press #13, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(i) Flexographic printing press, identified as press #14, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(j) Flexographic printing press, identified as press #15, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(k) Flexographic printing press, identified as press #16, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(l) Flexographic printing press, identified as press #17, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(m) Flexographic printing press, identified as press #18, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(n) Flexographic printing press, identified as press #19, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(o) Flexographic printing press, identified as press #20, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(p) Flexographic printing press, identified as press #21, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(q) Flexographic printing press, identified as press #22, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(r) Flexographic printing press, identified as press #23, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14..

(s) Flexographic printing press, identified as press #24, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(t) Flexographic printing press, identified as press #25, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(u) Flexographic printing press, identified as press #27, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(v) Flexographic printing press, identified as press #28, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(w) Flexographic printing press, identified as press #29, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(x) Flexographic printing press, identified as press #30, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(y) Flexographic printing press, identified as press #31, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(z) Flexographic printing press, identified as press #32, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(aa) Flexographic printing press, identified as press #33, constructed in 2003, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(bb) Flexographic printing press, identified as press #36, constructed in 2001, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(cc) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(dd) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ee) Flexographic printing press, identified as press #39, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ff) Flexographic printing press, identified as press #40, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(gg) Flexographic printing press, identified as press #41, constructed in 2012, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(hh) Flexographic printing press installed in a Permanent Total Enclosure, identified as press #42, constructed in 2014, using oxidation for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(jj) One (1) Photopolymer plate making facility, identified as Cyrel, constructed in 1992, and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13 and/or 14.

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, and the Cyrel, and exhausting to stack 14.

(uu) Regenerative thermal oxidizer, identified as I15, with a maximum air flow rate of 40000 CFM, and a maximum heat input rating of 7.3 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17, and/or #18, and exhausting to stack 15.

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

Pursuant to 326 IAC 2-2, PSD/SPM 167-21257-00033, issued on November 13, 2006, and SPM 167-23850-00033, issued on May 22, 2007, the PSD BACT for Bemis Company, Inc. shall be the following:

(a) Whenever any of presses #11, #12, #13, #14, #15, #16, #17, or #18 is applying VOC-

containing materials, the exhaust from that press shall be vented through the operating Plant 1 oxidation control system consisting of oxidizer I15. Each press shall have a capture system efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%.

(b) Whenever any of presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #37, #38, #39 or #40 is applying VOC-containing materials, the exhaust from that press shall be vented through the operating Plant 2 oxidation control system consisting of oxidizers I5, I6, I7, I8, I9, I10, I11, I12, I13, and I14. 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 system for presses #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #37, #38, #39 and #40 shall be considered to achieve one-hundred percent (100%) capture efficiency if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:

(1) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.

(2) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.

(3) The total area of all NDOs 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 NDOs shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDOs shall be into the enclosure.

(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.

D.1.2 PSD Minor Limit [326 IAC 2-2]

(a) Pursuant to SSM 167-18122-00033, issued on May 3, 2004, and revised through T167-6182-00033, issued on June 28, 2004, the following conditions apply:

(i) The annual VOC usage on press #36 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: (Printing VOC usage) * (1 - overall control efficiency) + Cleanup VOC loss < 39.9 tons. Compliance with this condition shall render this press not subject to the provisions of 326 IAC 2-2, Prevention of Significant Deterioration (PSD).

(ii) Whenever press #36 is applying VOC-containing materials, the press exhaust shall be vented through the operating oxidation control system.

(b) The following conditions renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

(i) The annual VOC usage at press #41 shall be limited such that the potential to emit is less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

$$\text{VOC emissions per month} = \frac{[(\text{Actual VOC usage in tons} * (1 - \text{overall control efficiency}) + \text{Cleanup VOC loss} + \text{Uncontrolled VOC}]}{100}$$

Compliance with this limit, combined with the potential to emit VOC from associated dryer at this press, shall limit the total potential to emit of VOCs to less than 40 tons per year, and shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the flexographic printing press and associated dryer.

(c) The following conditions renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

(i) The total VOC emissions from press #42 including cleanup activities shall be limited to less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

$$\text{VOC emissions per month} = \frac{[(\text{Actual VOC usage in tons} * (1 - \text{overall control efficiency}) + \text{Cleanup VOC loss} + \text{Uncontrolled VOC}]}{100}$$

Compliance with this limit, combined with the potential to emit VOC from associated dryers at this press, shall limit the source-wide total potential to emit of VOCs to less than 40 tons per year, and shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the flexographic printing press and associated dryers.

(d) Pursuant to SSM 167-34018-00033, and 326 IAC 2-2 (PSD), the conditions apply:

The total VOC emissions from Photopolymer plate making facility, identified as Cyrel, including cleanup activities shall be limited to less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

$$\text{VOC emissions per month} = [(\text{Actual VOC usage in tons} * (1 - \text{overall control efficiency}) + \text{Cleanup VOC loss} + \text{Uncontrolled VOC}] / 100$$

Compliance with this limit shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the Photopolymer plate making facility, identified as Cyrel.

D.1.3 VOC Best Available Control Technology (BACT) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 and SSM 167-34018-00033, the Permittee shall comply with the following limits for VOC BACT:

(a) Whenever the Photopolymer plate making process, identified as Cyrel, is applying VOC-containing materials, exhaust from that press shall be vented through the operating Plant 2 oxidation control system consisting of oxidizers I5, I6, I7, I8, I9, I10, I11, I12, I13, and I14. Cyrel shall have a minimum capture efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%. The capture efficiency shall be considered to achieve one-hundred percent (100%)capture efficiency if the system meets the following criteria under EPA Method 204.

(b) The Cyrel Plate making system shall not process more than 140,160,000 square inches of photopolymer material per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months.

(c) The VOC input shall not exceed 2.16 lbs per thousand square inch of photopolymer material per twelve (12) consecutive month period.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

(a) Pursuant to 326 IAC 8-5-5(e)(2)(A), the VOC capture system for presses #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, and #25, in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner to attain and maintain a minimum 65% overall control efficiency for flexographic printing.

(b) Pursuant to 326 IAC 8-5-5(e)(2)(C), the VOC capture system for presses #27, #28, #29, #30, #31, #32, #36, #37, #38, #39, #40, and #41 in combination with the catalytic/regenerative thermal oxidation system, shall be operated in such a manner to attain and maintain a minimum 75% overall control efficiency for flexographic printing.

(c) Pursuant to 326 IAC 8-5-5(e)(2)(C), the VOC capture system for flexographic printing press #42, shall operate in combination with the catalytic/regenerative thermal oxidation system such that overall VOC control efficiency shall have a minimum seventy-five percent (75%) overall control efficiency.

(d) Pursuant to 326 IAC 8-5-5(c)(3)(B), the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) and regenerative thermal oxidizers (I13, I14, and I15) shall maintain a minimum destruction efficiency of 90%.

(e) Pursuant to 326 IAC 8-5-5(f), the Permittee shall use work practices to minimize VOC emissions from cleaning operations. Work practices shall include, but not be limited to, the following:

(1) When not in use, all cleaning materials shall be kept in closed containers.

(2) Cleaning materials shall be conveyed from one (1) location to another in closed containers or pipes.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of Cyrel, in order to demonstrate compliance with Conditions D.1.1, D.1.2, D.1.3, and D.1.4, the Permittee shall perform test to verify the VOC destruction efficiency on catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, I12, I13, I14, and I15, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Testing of press #42, to verify its capture efficiency, shall be performed not later than 180 days after start-up of press #42.

(c) Testing requirements for the capture efficiency of the flexographic presses identified as #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #37, #38, #39, #40, #41, #42 and Cyrel shall be performed no later than 180 days whenever reconfiguration or change in the design of a press is made as follows:

(1) The capture efficiency test shall be repeated for a press in this section whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:

(A) The addition of print station to a press;

(B) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers); or

(C) Changing the static duct pressure.

(d) Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.7 Permanent Total Enclosure

The capture system for presses #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #37, #38, #39 #40 and Cyrel 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:

(a) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.

(b) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.

(c) The total area of all NDOs shall not exceed 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 NDOs shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDOs shall be into the enclosure.

(e) All access doors and windows whose areas are not included in (3) and are not included in the calculation in (4) 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.

D.1.8 Oxidizer Grouping

(a) Regenerative thermal oxidizers (RTOs) I13, I14, and catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, I12 have been interconnected with a common press exhaust plenum to form an oxidization control system for plant 2. As a control system, the captured VOC emissions from any operating press are exhausted to this common press exhaust plenum and primarily controlled by the RTOs.

(b) To prevent an uncontrolled release of captured VOC emissions:

(1) Before any press can operate, the total expected flow rate from all operating presses must be less than or equal to the total maximum flow rate capacity of all operating oxidizers in the oxidation control system.

(2) The combined exhaust flow of all the presses in operation shall not exceed the combined airflow capacity of the oxidizers that are in operation at any time.

(3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidization control system and the press and cyrel 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.

(4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press and Cyrel shall be immediately shut down.

(5) A log of all such oxidation control system malfunctions shall be kept and made available to the Office of Air Quality (OAQ) 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).

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

D.1.9 Oxidizer Temperature [326 IAC 2-2]

(a) A continuous monitoring system shall be calibrated and maintained on each oxidizer for measuring operating temperature used to control emissions from presses #11, #12, #13,

#14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #36 #37, #38, #39, #40, #41, #42, and Cryel. For the purpose of this condition, continuous monitoring means recording the temperature no less often than every 15 minutes. The operating temperature for the catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11 and I12) is the catalyst bed inlet temperature and the operating temperature for the regenerative thermal oxidizers (I13, I14, and I15) is the combustion zone temperature. The output of this system shall be recorded as a three (3) hour average.

(b) The Permittee shall determine the minimum 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 Conditions D.1.1 and D.1.2, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the oxidizers at or above the 3-hour average temperature as specified by the catalyst manufacturer (for catalytic oxidizers) for VOC or as observed during the most recent compliant stack test (for both catalytic and regenerative thermal oxidizers).

(d) Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour temperature that falls below the above mentioned temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring [326 IAC 2-2] [40 CFR 64]

(a) The Permittee shall establish the appropriate monitoring parameter for each press and Cyrel (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.1.1, D.1.2, and D.1.4.

(b) The Permittee shall maintain the following monitoring parameter value for Press #36 for each day the press is operating as an indication that capture is being attained: Duct pressure or fan amperage - The Permittee shall maintain the flow indicator parameter at a value at least eight-five percent (85%) of the value as established during the most recent performance test.

(c) The Permittee shall maintain one of the following monitoring parameter values for each press and Cyrel enclosed in a PTE for each day the press is operating as an indication that 100 percent capture is being attained:

(1) Differential pressure - The Permittee shall maintain a differential pressure at a value of negative (-) 0.007 inches of water column or less, or

(2) 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.

(d) The established monitoring parameter value shall be observed at least once per day for each day the press is operating.

D.1.11 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, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #36, #37, #38, #39, #40, #41 and #42 and Cyrel:

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

	Indicator #1	Indicator #2	Indicator # 3

	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 negative (-) 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 reporting requirement.	Any excursion shall require that the process be immediately shut down and remain down until the problem can be corrected. Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria			
A. Data Representativeness	Properly positioned dampers, leak-free ductwork and a leak-free enclosure of the process will assure that all of the exhaust will reach the control device. Inspections will identify problems.	Properly operating interlocks will assure that the processes will be shut down if the bypass damper is open to atmosphere.	The monitor measures the pressure differential at the interface between the wall of the enclosure and surrounding atmospheres.
B. Verification of Operational Status	Inspection records.	Inspection records.	The Permittee must have valid data from at least 90 percent of the hours during which the process operated.
C. QA/QC Practices and Criteria	Not applicable.	Not applicable.	Validation of instrument calibration conducted annually. Compare to calibrated meter, or calibrate using pressure standard, or according to manufacturer's instructions.
D. Monitoring Frequency	Quarterly	Annually	Monitor continuously.
Data Collection Procedure	Record results of inspections and observations.	Record results of inspections and observations.	Record at least once every minute on a chart or electronic media.
Averaging Period	Not applicable.	Not applicable	Not applicable
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.

	Indicator #1	Indicator #2	Indicator # 3
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Quarterly	Annually.	Quarterly

(b) Monitoring Approach for Unenclosed Presses

	Indicator # 1	Indicator #2	Indicator #3[a]
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.	An excursion is defined as any finding that any interlock is inoperative.	General overflow of smoke should be into the dryer web slot or application area.
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 can not be operated until negative flow into the dryer system or application area is demonstrated. Each excursion triggers an assessment of the problem, corrective action, and a reporting requirement.
III. Performance Criteria			
A. Data Representativeness	Properly positioned dampers and leak free ductwork will assure that all of the normally captured exhaust will reach the control device. Inspections will identify problems.	Properly operating interlocks will assure that the process will be shut down if there is insufficient flow or the bypass damper is open to atmosphere.	Monitoring approach will assure the dryer is set to properly contain supply air and the airflow is into the application area.
B. Verification of Operational Status	Inspection records.	Inspection records.	Not applicable
C. QA/QC Practices and Criteria	Not applicable	Not applicable	Not applicable
D. Monitoring Frequency	Quarterly	Annually.	Whenever the location of the dryer is disrupted. (This may not be necessary for two piece dryers.)
Data Collection Procedure	Record results of inspections and observations.	Record results of inspections and observations	Not applicable
Averaging Period	Not applicable.	Not applicable.	Not applicable.
E. Recordkeeping	Maintain for a period of 5 years records of Inspections, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of Inspections, including dates and initials of person conducting inspection, and of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and of corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause	Number, duration, cause	Number, duration, cause

	of any excursion and the corrective action taken.	of any excursion and the corrective action taken.	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.

(c) 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 any 3-hour period when the average operating temperature is less than the average operating temperature demonstrated during the most recent compliant performance test.	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 Catalyst bed inlet temperature shall be accurate to within 1.0% of temperature measured or ±1°C, whichever is greater.	Inspections of the oxidizer system will identify problems.	A test protocol shall be prepared and approved by IDEM prior to conducting the performance test.	Analysis will determine the conversion efficiency of the catalyst.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.	Not applicable
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria ± 20°F.	Not applicable.	EPA test methods approved in protocol.	Not applicable.
D. Monitoring Frequency	Measured continuously	• 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	Three hours.	Not applicable.	Not applicable.	Not applicable.

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
E. Record Keeping	Maintain for a period of 5 years records of chart recorder paper or electronic media and corrective actions taken in response to excursions.	Maintain for a period of 5 years records of inspections and corrective actions taken in response to excursions.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain records of corrective actions taken in response to excursions.	Maintain for a period of 5 years records of dates of catalyst sampling, initials of person conducting sampling, catalyst analysis and corrective actions taken in response to excursions.
F. Reporting	Number, duration, cause of any excursion and the corrective action taken.	Number, duration, cause of any excursion and the corrective action taken.	Submit test protocol and notification of testing to IDEM at least 35 days prior to test date. Submit test report 45 days after conducting a performance test.	Number, duration, cause of any excursion and the corrective action taken.
Frequency	Quarterly	Annually.	For each performance test conducted.	Annually.

(d) Monitoring Approach for Regenerative Thermal Oxidizers:

	Indicator #1	Indicator #2	Indicator #3
I. Indicator	Oxidizer combustion zone temperature.	Work practice/inspection.	Performance test
Measurement Approach	Continuously monitor the operating temperature of the oxidizer combustion zone.	Inspect internal and external structural integrity of oxidizer to ensure proper operation.	Conduct emissions test to demonstrate compliance with permitted destruction efficiency.
II. Indicator Range	An excursion is identified as any 3-hour period when the average operating temperature is less than the average operating temperature demonstrated during the most recent compliant performance test.	An excursion is identified as any finding that the structural integrity of the oxidizer has been jeopardized and it no longer operates as designed.	An excursion is identified as any finding that the oxidizer does not meet the permitted destruction efficiency.
Corrective Action	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.	Each excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria			
A. Data Representativeness	Any temperature-monitoring device employed to measure the oxidizer combustion zone temperature shall be accurate to within 1.0% of temperature measured or ±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.
B. Verification of Operational Status	Temperatures recorded on chart paper or electronic media. The Permittee must have valid data from at least 90 percent of the hours during which the process operated.	Inspection records.	Not applicable.
C. QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria ± 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.

	Indicator #1	Indicator #2	Indicator #3
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	Three hours.	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.

D.1.12 Monitoring [40CFR 64]

The Permittee shall conduct annual sampling and testing of the catalyst utilized in the eight (8) catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, and I12) in order to determine if it has reached a point where its effectiveness is diminished to where compliance with the minimum destruction efficiency is at risk. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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.1.13 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1, D.1.3, D.1.4, D.1.8, and D.1.9 the Permittee shall maintain records in accordance with (1), (2), and (3) below.

(1) The continuous inlet temperature to the catalyst bed (on a three-hour average basis) for the catalytic oxidizers I5, I6, I7, I8, I9, I10, I11, and I12 and the three (3) hour average inlet temperature to the catalyst bed used to demonstrate compliance during the most recent compliant performance test.

(2) The continuous combustion zone temperature (on a three-hour average basis) for the oxidizers I13, I14, and I15 and the three (3) hour average combustion zone temperature used to demonstrate compliance during the most recent compliant performance test. The Permittee shall include in its daily record when a temperature reading is not taken and the reason for the lack of temperature reading (e.g., the thermal oxidizer was not operating).

(3) Daily record of the monitoring parameter value (duct pressure, or fan amperage, or differential pressure, or other parameter as approved by IDEM). The Permittee shall include in its daily record when a pressure or fan amperage reading is not taken and the reason for the lack of pressure or fan amperage reading (e.g., the thermal oxidizer was not operating).

(b) To document the compliance status with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) 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.1.2.

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

(2) The amount of coating material and solvent, used for the 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.

(c) To document the compliance status with Conditions D.1.2 (d) and D.1.3, the Permittee shall maintain the records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits; and square inches of Cyrel plate making facility established in Conditions D.1.2(d) and D.1.3.

(1) The total amount of square inches processed each month for Cyrel Plate making facility.

(2) The total VOC emissions for each month.

(d) To document the compliance status with Condition D.1.11, the Permittee shall maintain records of samples. These records shall include, as a minimum, dates, initials of the person taking the sample, results, and corrective actions (if any are required).

(e) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.1.14 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.1.2 and D.1.3(b) 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, not later than thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.2 FACILITY OPERATION CONDITIONS: Closed Solvent Spray Parts Washer

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

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

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a device for draining cleaned parts.

(3) Close the degreaser cover whenever parts are not being handled in the degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.

(5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:

(A) must be a solid, fluid stream; and
(B) shall be applied at a pressure that does not cause excessive splashing.

D.2.2 Material requirements for cold cleaner degreasers [326 IAC 8-3-8]

(1) Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not cause or allow the sale of solvents for use in cold cleaning cleaner degreasing operations with a VOC composite partial vapor pressure, when diluted at the manufacturer's recommended blend and dilution, that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

(2) Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure than exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(3) Pursuant to 326 IAC 8-3-8(c)(1), on and after January 1, 2015, the following records shall be maintained for each sale of cold cleaner degreaser solvent:

(A) The name and address of the solvent purchaser.
(B) The date of sale (or invoice/bill date of contract servicer indicating service date).
(C) The type of solvent sold.
(D) The volume of each unit of solvent sold.
(E) The total volume of the solvent sold.
(F) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(4) Pursuant to 326 IAC 8-3-8(c)(2), on and after January 1, 2015, the following records shall be maintained for each purchase of cold cleaner degreaser solvent:

(A) The name and address of the solvent supplier.
(B) The date of purchase (or invoice/bill dates of contract servicer indicating service date).
(C) The type of solvent purchased.
(D) The total volume of the solvent purchased.
(E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(5) All records required by 326 IAC 8-3-8(c)(2) shall be:

(A) retained on-site or accessible electronically from the site for the most recent three (3) year period; and
(B) reasonably accessible for an additional two (2) year period.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

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

(a) Flexographic printing press, identified as press #1, installed in 1980, using no control, and exhausting to stack 201.

(b) Flexographic printing press, identified as press #2, installed in 1970, using no control, and exhausting to stack 202.

(c) Flexographic printing press, identified as press #8, installed in 1974, using no control, and exhausting to stack 208.

(d) Flexographic printing press, identified as press #9, installed in 1973, using no control, and exhausting to stack 209.

(e) Flexographic printing press, identified as press #10, installed in 1980, using no control, and exhausting to stack 210.

(f) Flexographic printing press, identified as press #11, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(g) Flexographic printing press, identified as press #12, constructed in 1986, using oxidation for control, and exhausting to stack 15.

(h) Flexographic printing press, identified as press #13, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(i) Flexographic printing press, identified as press #14, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(j) Flexographic printing press, identified as press #15, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(k) Flexographic printing press, identified as press #16, constructed in 1987, using oxidation for control, and exhausting to stack 15.

(l) Flexographic printing press, identified as press #17, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(m) Flexographic printing press, identified as press #18, constructed in 1990, using oxidation for control, and exhausting to stack 15.

(n) Flexographic printing press, identified as press #19, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(o) Flexographic printing press, identified as press #20, constructed in 1990, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(p) Flexographic printing press, identified as press #21, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(q) Flexographic printing press, identified as press #22, constructed in 1991, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(r) Flexographic printing press, identified as press #23, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14..

(s) Flexographic printing press, identified as press #24, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(t) Flexographic printing press, identified as press #25, constructed in 1994, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(u) Flexographic printing press, identified as press #27, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(v) Flexographic printing press, identified as press #28, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(w) Flexographic printing press, identified as press #29, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(x) Flexographic printing press, identified as press #30, constructed in 1997, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(y) Flexographic printing press, identified as press #31, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(z) Flexographic printing press, identified as press #32, constructed in 2000, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(aa) Flexographic printing press, identified as press #33, constructed in 2003, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(bb) Flexographic printing press, identified as press #36, constructed in 2001, using oxidation as control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(cc) Flexographic printing press, identified as press #37, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(dd) Flexographic printing press, identified as press #38, constructed in 2006, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ee) Flexographic printing press, identified as press #39, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(ff) Flexographic printing press, identified as press #40, constructed in 2007, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(gg) One (1) Flexographic printing press, identified as press #41, constructed in 2012, using oxidation for control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(hh) One (1) Flexographic printing press installed in a Permanent Total Enclosure, identified as press #42, constructed I 2014, using oxidation for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or stack 14.

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 and/or #42, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42 and the Cyrel and exhausting to stack 14.

(uu) Regenerative thermal oxidizer, identified as I15, with a maximum air flow rate of 40000 CFM, and a maximum heat input rating of 7.3 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #11, #12, #13, #14, #15, #16, #17, and/or #18, and exhausting to stack 15.

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

enforceable conditions.)

E.1.1 General Provisions Relating to National Emissions Standard for Hazardous Air Pollutants for the Printing and Publishing Industry [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.820, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the affected source, as specified in Appendix A of 40 CFR Part 63, Subpart KK, in accordance with the schedule in 40 CFR 63 Subpart KK (Attachment A).

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 National Emissions Standard for Hazardous Air Pollutants for the Printing and Publishing Industry [326 IAC 20-1] [40 CFR Part 63, Subpart A] [40 CFR Part 63, Subpart KK]

Pursuant to CFR Part 63, Subpart KK, the Permittee shall comply with the provisions of 40 CFR Part 63.820, for the affected source specified as follows:

(1) 40 CFR 63.829(d) (Recordkeeping requirements)
(2) 40 CFR 63.830(b)(1) (Reporting requirements)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033
Facility: Press #36
Parameter: VOC emissions
Limit: Less than 39.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

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

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033
Facility: Press #41
Parameter: VOC emissions
Limit: Less than 39.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

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

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033
Facility: Press #42
Parameter: VOC emissions
Limit: Less than 39.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

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

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033
Facility: Cyrel
Parameter: VOC emissions
Limit: Less than 39.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Bemis Company, Inc.
Source Address: 1350 N. Fruitridge Ave., Terre Haute, IN 47804
Part 70 Permit No.: T167-27050-00033
Facility: Cyrel
Parameter: Area of Plate Surface
Limit: Cyrel Plate making system shall not process more than 140,160,000 square inches per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, Indiana 47804
Part 70 Permit No.: T167-27050-00033

Months: _____ to _ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attachment A

Part 70 Operating Permit No: 167-34096-00033

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart KK—National Emission Standards for Hazardous Air Pollutants for the Printing and Publishing Industry

SOURCE: 61 FR 27140, May 30, 1996, unless otherwise noted.

What This Subpart Covers

§63.820 Applicability.

(a) The provisions of this subpart apply to:

(1) Each new and existing facility that is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated, and

(2) Each new and existing facility at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated for which the owner or operator chooses to commit to and meets the criteria of paragraphs (a)(2)(i) and (ii) of this section for purposes of establishing the facility to be an area source of HAP with respect to this subpart. A facility which establishes area source status through some other mechanism, as described in paragraph (a)(7) of this section, is not subject to the provisions of this subpart.

(i) Use less than 9.1 Mg (10 tons) per each rolling 12-month period of each HAP at the facility, including materials used for source categories or purposes other than printing and publishing, and

(ii) Use less than 22.7 Mg (25 tons) per each rolling 12-month period of any combination of HAP at the facility, including materials used for source categories or purposes other than printing and publishing.

(3) Each facility for which the owner or operator chooses to commit to and meets the criteria stated in paragraph (a)(2) of this section shall be considered an area source, and is subject only to the provisions of §§63.829(d) and 63.830(b)(1) of this subpart.

(4) Each facility for which the owner or operator commits to the conditions in paragraph (a)(2) of this section may exclude material used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining electric, propane, gasoline and diesel powered motor vehicles operated by the facility, and the use of HAP contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion).

(5) Each facility for which the owner or operator commits to the conditions in paragraph (a)(2) of this section to become an area source, but subsequently exceeds either of the thresholds in paragraph (a)(2) of this section for any rolling 12-month period (without first obtaining and complying with other limits that keep its potential to emit HAP below major source levels), shall be considered in violation of its commitment for that 12-month period and shall be considered a major source of HAP beginning the first month after the end of the 12-month period in which either of the HAP-use thresholds was exceeded. As

a major source of HAP, each such facility would be subject to the provisions of this subpart as noted in paragraph (a)(1) of this section and would no longer be eligible to use the provisions of paragraph (a)(2) of this section, even if in subsequent 12-month periods the facility uses less HAP than the thresholds in paragraph (a)(2) of this section.

(6) An owner or operator of an affected source subject to paragraph (a)(2) of this section who chooses to no longer be subject to paragraph (a)(2) of this section shall notify the Administrator of such change. If, by no longer being subject to paragraph (a)(2) of this section, the facility at which the affected source is located becomes a major source:

(i) The owner or operator of an existing source must continue to comply with the HAP usage provisions of paragraph (a)(2) of this section until the source is in compliance with all relevant requirements for existing affected sources under this subpart;

(ii) The owner or operator of a new source must continue to comply with the HAP usage provisions of paragraph (a)(2) of this section until the source is in compliance with all relevant requirements for new affected sources under this subpart.

(7) Nothing in this paragraph is intended to preclude a facility from establishing area source status by limiting its potential to emit through other appropriate mechanisms that may be available through the permitting authority.

(b) This subpart does not apply to research or laboratory equipment.

(c) In response to an action to enforce the standards set forth in this subpart, an owner or operator may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by a malfunction, as defined in §63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(1) To establish the affirmative defense in any action to enforce such a limit, the owners or operators of a facility must timely meet the notification requirements of paragraph (c)(2) of this section, and must prove by a preponderance of evidence that:

(i) The excess emissions were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, or a process to operate in a normal or usual manner; and could not have been prevented through careful planning, proper design or better operation and maintenance practices; and did not stem from any activity or event that could have been foreseen and avoided, or planned for; and were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(ii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs;

(iii) The frequency, amount, and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

(iv) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(v) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment, and human health;

(vi) All emissions monitoring and control systems were kept in operation, if at all possible, consistent with safety and good air pollution control practices;

(vii) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs;

(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(ix) The owner or operator has prepared a written root cause analysis, the purpose of which is to determine, correct and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(2) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than 2 business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in this subpart to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (c)(1) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29799, May 24, 2006; 76 FR 22597, Apr. 21, 2011]

§63.821 Designation of affected sources.

(a) The affected sources subject to this subpart are:

(1) All of the publication rotogravure presses and all related equipment, including proof presses, cylinder and parts cleaners, ink and solvent mixing and storage equipment, and solvent recovery equipment at a facility.

(2) All of the product and packaging rotogravure or wide-web flexographic printing presses at a facility plus any other equipment at that facility which the owner or operator chooses to include in accordance with paragraphs (a)(3) or (a)(4) of this section, except

(i) Proof presses, unless the owner or operator chooses to include proof presses in the affected source in accordance with paragraph (a)(5) of this section.

(ii) Any product and packaging rotogravure or wide-web flexographic press which is used primarily for coating, laminating, or other operations which the owner or operator chooses to exclude, provided that

(A) the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied by the press using product and packaging rotogravure print stations and the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied by the press using wide-web flexographic print stations in each month never exceeds 5 percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners,

reducers, and other materials applied by the press in that month, including all inboard and outboard stations; and

(B) The owner or operator maintains records as required in §63.829(f).

(3) The owner or operator of an affected source, as defined in paragraph (a)(2) of this section, may elect to include in that affected source stand-alone equipment subject to the following provisions:

(i) Stand-alone equipment meeting any of the criteria specified in this subparagraph is eligible for inclusion:

(A) The stand-alone equipment and one or more product and packaging rotogravure or wide-web flexographic presses are used to apply solids-containing materials to the same web or substrate; or

(B) The stand-alone equipment and one or more product and packaging rotogravure or wide-web flexographic presses apply a common solids-containing material; or

(C) A common control device is used to control organic HAP emissions from the stand-alone equipment and from one or more product and packaging rotogravure or wide-web flexographic printing presses;

(ii) All eligible stand-alone equipment located at the facility is included in the affected source; and

(iii) No product and packaging rotogravure or wide-web flexographic presses are excluded from the affected source under the provisions of paragraph (a)(2)(ii) of this section.

(4) The owner or operator of an affected source, as defined in paragraph (a)(2) of this section, may elect to include in that affected source narrow-web flexographic presses subject to the following provisions:

(i) Each narrow-web flexographic press meeting any of the criteria specified in this subparagraph is eligible for inclusion:

(A) The narrow-web flexographic press and one or more product and packaging rotogravure or wide-web flexographic presses are used to apply solids containing material to the same web or substrate; or

(B) The narrow-web flexographic press and one or more product and packaging rotogravure or wide-web flexographic presses apply a common solids-containing material; or

(C) A common control device is used to control organic HAP emissions from the narrow-web flexographic press and from one or more product and packaging rotogravure or wide-web flexographic presses; and

(ii) All eligible narrow-web flexographic presses located at the facility are included in the affected source.

(5) The owner or operator of an affected source, as defined in paragraph (a)(2) of this section, may elect to include in that affected source rotogravure proof presses or flexographic proof presses subject to the following provisions:

(i) Each proof press meeting any of the criteria specified in this subparagraph is eligible for inclusion.

(A) The proof press and one or more product and packaging rotogravure or wide-web flexographic presses apply a common solids-containing material; or

(B) A common control device is used to control organic HAP emissions from the proof press and from one or more product and packaging rotogravure or wide-web flexographic presses; and

(ii) All eligible proof presses located at the facility are included in the affected source.

(6) Affiliated operations such as mixing or dissolving of ink or coating ingredients prior to application; ink or coating mixing for viscosity adjustment, color tint or additive blending, or pH adjustment; cleaning of ink or coating lines and line parts; handling and storage of inks, coatings, and solvents; and conveyance and treatment of wastewater are part of the printing and publishing industry source category, but are not part of the product and packaging rotogravure or wide-web flexographic printing affected source.

(7) Other presses are part of the printing and publishing industry source category, but are not part of the publication rotogravure affected source or the product and packaging rotogravure or wide-web flexographic printing affected source and are, therefore, exempt from the requirements of this subpart except as provided in paragraph (a)(3) of this section.

(8) Narrow web-flexographic presses are part of the printing and publishing industry source category, but are not part of the publication rotogravure affected source or the product and packaging rotogravure or wide-web flexographic printing affected source and are, therefore, exempt from the requirements of this subpart except as provided in paragraphs (a)(3) through (5) of this section.

(b) Each product and packaging rotogravure or wide-web flexographic printing affected source at a facility that is a major source of HAP, as defined in 40 CFR 63.2, that complies with the criteria of paragraphs (b)(1) or (b)(2) on and after the applicable compliance date as specified in §63.826 of this subpart is subject only to the requirements of §§63.829(e) and 63.830(b)(1) of this subpart.

(1) The owner or operator of the affected source applies no more than 500 kilograms (kg) per month, for every month, of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials on product and packaging rotogravure or wide-web flexographic printing presses, or

(2) The owner or operator of the affected source applies no more than 400 kg per month, for every month, of organic HAP on product and packaging rotogravure or wide-web flexographic printing presses.

(c) Each product and packaging rotogravure or wide-web flexographic printing affected source at a facility that is a major source of HAP, as defined in 40 CFR 63.2, that complies with neither the criterion of paragraph (b)(1) nor (b)(2) of this section in any month after the applicable compliance date as specified in §63.826 of this subpart is, starting with that month, subject to all relevant requirements of this subpart and is no longer eligible to use the provisions of paragraph (b) of this section, even if in subsequent months the affected source does comply with the criteria of paragraphs (b)(1) or (b)(2) of this section.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29799, May 24, 2006]

§63.822 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the CAA and in subpart A of this part.

Affirmative defense means, in the context of an enforcement proceeding, a response or a defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Always-controlled work station means a work station associated with a dryer from which the exhaust is delivered to a control device, with no provision for the dryer exhaust to bypass the control device. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

Capture efficiency means the fraction of all organic HAP emissions generated by a process that are delivered to a control device, expressed as a percentage.

Capture system means a hood, enclosed room, or other means of collecting organic HAP emissions into a closed-vent system that exhausts to a control device.

Car-seal means a seal that is placed on a device that is used to change the position of a valve or damper (e.g., from open to closed) in such a way that the position of the valve or damper cannot be changed without breaking the seal.

Certified product data sheet (CPDS) means documentation furnished by suppliers of inks, coatings, varnishes, adhesives, primers, solvents, and other materials or by an independent third party that provides the organic HAP weight fraction of these materials determined in accordance with §63.827(b), or the volatile matter weight fraction or solids weight fraction determined in accordance with §63.827(c). A material safety data sheet (MSDS) may serve as a CPDS provided the MSDS meets the data requirements of §63.827(b) and (c). The purpose of the CPDS is to assist the owner or operator in demonstrating compliance with the emission limitations presented in §§63.824-63.825.

Coating means material applied onto or impregnated into a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, solvent-borne coatings, waterborne coatings, wax coatings, wax laminations, extrusion coatings, extrusion laminations, 100 percent solid adhesives, ultra-violet cured coatings, electron beam cured coatings, hot melt coatings, and cold seal coatings. Materials used to form unsupported substrates such as calendaring of vinyl, blown film, cast film, extruded film, and coextruded film are not considered coatings.

Control device means a device such as a carbon adsorber or oxidizer which reduces the organic HAP in an exhaust gas by recovery or by destruction.

Control device efficiency means the ratio of organic HAP emissions recovered or destroyed by a control device to the total organic HAP emissions that are introduced into the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Flexible packaging means any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, labels, liners and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

Flexographic press means an unwind or feed section, which may include more than one unwind or feed station (such as on a laminator), a series of individual work stations, one or more of which is a flexographic print station, any dryers (including interstage dryers and overhead tunnel dryers) associated with the work stations, and a rewind, stack, or collection section. The work stations may be oriented vertically, horizontally, or around the circumference of a single large impression cylinder. Inboard and outboard work stations, including those employing any other technology, such as rotogravure, are

included if they are capable of printing or coating on the same substrate. A publication rotogravure press with one or more flexographic imprinters is not a flexographic press.

Flexographic print station means a print station on which a flexographic printing operation is conducted. A flexographic print station includes an anilox roller that transfers material to a raised image (type or art) on a plate cylinder. The material is then transferred from the image on the plate cylinder to the web or sheet to be printed. A flexographic print station may include a fountain roller to transfer material from the reservoir to the anilox roller, or material may be transferred directly from the reservoir to the anilox roller. The materials applied are of a fluid, rather than paste, consistency.

HAP applied means the organic HAP content of all inks, coatings, varnishes, adhesives, primers, solvent, and other materials applied to a substrate by a product and packaging rotogravure or wide-web flexographic printing affected source.

HAP used means the organic HAP applied by a publication rotogravure printing affected source, including all organic HAP used for cleaning, parts washing, proof presses, and all organic HAP emitted during tank loading, ink mixing, and storage.

Intermittently-controllable work station means a work station associated with a dryer with provisions for the dryer exhaust to be delivered to or diverted from a control device depending on the position of a valve or damper. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

Month means a calendar month or a prespecified period of 28 days to 35 days.

Narrow-web flexographic press means a flexographic press that is not capable of printing substrates greater than 18 inches in width and that does not also meet the definition of rotogravure press (i.e., it has no rotogravure print stations).

Never-controlled work station means a work station which is not equipped with provisions by which any emissions, including those in the exhaust from any associated dryer, may be delivered to a control device.

Other press means a lithographic press, letterpress press, or screen printing press that does not meet the definition of rotogravure press or flexographic press (i.e., it has no rotogravure print stations and no flexographic print stations), and that does not print on fabric or other textiles as defined in the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP (40 CFR part 63, subpart OOOO), wood furniture components as defined in the Wood Furniture Manufacturing Operations NESHAP (40 CFR part 63, subpart JJ) or wood building products as defined in the Surface Coating of Wood Building Products NESHAP (40 CFR part 63, subpart QQQQ).

Overall Organic HAP control efficiency means the total efficiency of a control system, determined either by:

(1) The product of the capture efficiency and the control device efficiency or

(2) A liquid-liquid material balance.

Print station means a work station on which a printing operation is conducted.

Printing operation means the formation of words, designs, or pictures on a substrate other than wood furniture components as defined in the Wood Furniture Manufacturing Operations NESHAP (40 CFR part 63, subpart JJ), wood building products as defined in the Surface Coating of Wood Building

Products NESHAP (40 CFR part 63, subpart QQQQ), and fabric or other textiles as defined in the Printing, Coating, and Dyeing of Fabric and Other Textiles NESHAP (40 CFR part 63, subpart OOOO), except for fabric or other textiles for use in flexible packaging.

Product and packaging rotogravure printing means the production, on a rotogravure press, of any printed substrate not otherwise defined as publication rotogravure printing. This includes, but is not limited to, folding cartons, flexible packaging, labels and wrappers, gift wraps, wall and floor coverings, upholstery, decorative laminates, and tissue products.

Proof press means any press which prints only non-saleable items used to check the quality of image formation of rotogravure cylinders or flexographic plates; substrates such as paper, plastic film, metal foil, or vinyl; or ink, coating varnish, adhesive, primer, or other solids-containing material.

Publication rotogravure press means a rotogravure press used for publication rotogravure printing. A publication rotogravure press may include one or more flexographic imprinters. A publication rotogravure press with one or more flexographic imprinters is not a flexographic press.

Publication rotogravure printing means the production, on a rotogravure press, of the following saleable paper products:

(1) Catalogues, including mail order and premium,

(2) Direct mail advertisements, including circulars, letters, pamphlets, cards, and printed envelopes,

(3) Display advertisements, including general posters, outdoor advertisements, car cards, window posters; counter and floor displays; point of purchase and other printed display material,

(4) Magazines,

(5) Miscellaneous advertisements, including brochures, pamphlets, catalog sheets, circular folders, announcements, package inserts, book jackets, market circulars, magazine inserts, and shopping news,

(6) Newspapers, magazine and comic supplements for newspapers, and preprinted newspaper inserts, including hi-fi and spectacolor rolls and sections,

(7) Periodicals, and

(8) Telephone and other directories, including business reference services.

Research or laboratory equipment means any equipment for which the primary purpose is to conduct research and development into new processes and products, where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Rotogravure press means an unwind or feed section, which may include more than one unwind or feed station (such as on a laminator), a series of individual work stations, one or more of which is a rotogravure print station, any dryers associated with the work stations, and a rewind, stack, or collection section. Inboard and outboard work stations, including those employing any other technology, such as flexography, are included if they are capable of printing or coating on the same substrate.

Rotogravure print station means a print station on which a rotogravure printing operation is conducted. A rotogravure print station includes a rotogravure cylinder and supply for ink or other solids

containing material. The image (type and art) to be printed is etched or engraved below the surface of the rotogravure cylinder. On a rotogravure cylinder the printing image consists of millions of minute cells.

Stand-alone equipment means an unwind or feed section, which may include more than one unwind or feed station (such as on a laminator); a series of one or more work stations and any associated dryers; and a rewind, stack, or collection section that is not part of a product and packaging rotogravure or wide-web flexographic press. Stand-alone equipment is sometimes referred to as “off-line” equipment.

Wide-web flexographic press means a flexographic press capable of printing substrates greater than 18 inches in width.

Work station means a unit on which material is deposited onto a substrate.

(b) The symbols used in equations in this subpart are defined as follows:

(1) C_{ahi}=the monthly average, as-applied, organic HAP content of solids-containing material, i, expressed as a weight-fraction, kg/kg.

(2) C_{asi}=the monthly average, as applied, solids content, of solids-containing material, i, expressed as a weight-fraction, kg/kg.

(3) C_{hi}=the organic HAP content of ink or other solids-containing material, i, expressed as a weight-fraction, kg/kg.

(4) C_{hij}=the organic HAP content of solvent j, added to solids-containing material i, expressed as a weight-fraction, kg/kg.

(5) C_{hj}=the organic HAP content of solvent j, expressed as a weight-fraction, kg/kg.

(6) [Reserved]

(7) C_{si}=the solids content of ink or other material, i, expressed as a weight-fraction, kg/kg.

(8) C_{vi}=the volatile matter content of ink or other material, i, expressed as a weight-fraction, kg/kg.

(9) E=the organic volatile matter control efficiency of the control device, percent.

(10) F=the organic volatile matter capture efficiency of the capture system, percent.

(11) G_i=the mass fraction of each solids containing material, i, which was applied at 20 weight-percent or greater solids content, on an as-applied basis, kg/kg.

(12) H = the monthly organic HAP emitted, kg.

(13) H_a=the monthly allowable organic HAP emissions, kg.

(14) H_L=the monthly average, as-applied, organic HAP content of all solids-containing materials applied at less than 0.04 kg organic HAP per kg of material applied, kg/kg.

(15) H_s=the monthly average, as-applied, organic HAP to solids ratio, kg organic HAP/kg solids applied.

(16) H_{si}=the as-applied, organic HAP to solids ratio of material i.

(17) L=the mass organic HAP emission rate per mass of solids applied, kg/kg.

(18) M_{Bi}=the sum of the mass of solids-containing material, i, applied on intermittently-controllable work stations operating in bypass mode and the mass of solids-containing material, i, applied on never-controlled work stations, in a month, kg.

(19) M_{Bj}=the sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied on intermittently-controllable work stations operating in bypass mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied on never-controlled work stations, in a month, kg.

(20) M_{ci}=the sum of the mass of solids-containing material, i, applied on intermittently-controllable work stations operating in controlled mode and the mass of solids-containing material, i, applied on always-controlled work stations, in a month, kg.

(21) M_{cj}=the sum of the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied on intermittently-controllable work stations operating in controlled mode and the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied on always-controlled work stations in a month, kg.

(22) [Reserved]

(23) M_{fi}=the organic volatile matter mass flow rate at the inlet to the control device, kg/h.

(24) M_{fo}=the organic volatile matter mass flow rate at the outlet of the control device, kg/h.

(25) M_{hu}=the mass of organic HAP used in a month, kg.

(26) M_{i}=the mass of ink or other material, i, applied in a month, kg.

(27) M_{ij}=the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, added to solids-containing material, i, in a month, kg.

(28) M_{j}=the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied in a month, kg.

(29) M_{Lj}=the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, added to solids-containing materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, in a month, kg.

(30) M_{vr}=the mass of volatile matter recovered in a month, kg.

(31) M_{vu}=the mass of volatile matter, including water, used in a month, kg.

(32) [Reserved]

(33) n=the number of organic compounds in the vent gas.

(34) p=the number of different inks, coatings, varnishes, adhesives, primers, and other materials applied in a month.

(35) q=the number of different solvents, thinners, reducers, diluents, or other non-solids-containing materials applied in a month.

(36) [Reserved]

(37) R=the overall organic HAP control efficiency, percent.

(38) R_e=the overall effective organic HAP control efficiency for publication rotogravure, percent.

(39) R_v=the organic volatile matter collection and recovery efficiency, percent.

(40) S=the mass organic HAP emission rate per mass of material applied, kg/kg.

(41) 0.0416=conversion factor for molar volume, kg-mol/m^3(@ 293 K and 760 mmHg).

[61 FR 27140, May 30, 1996, as amended at 71 FR 29800, May 24, 2006; 76 FR 22598, Apr. 21, 2011]

§63.823 Standards: General.

(a) Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indicating the applicability of the general provisions requirements to this subpart KK.

(b) Each owner or operator of an affected source subject to this subpart must at all times operate and maintain that affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[76 FR 22598, Apr. 21, 2011]

§63.824 Standards: Publication rotogravure printing.

(a) Each owner or operator of any publication rotogravure printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in §63.826 of this subpart.

(b) Each publication rotogravure affected source shall limit emissions of organic HAP to no more than eight percent of the total volatile matter used each month. The emission limitation may be achieved by overall control of at least 92 percent of organic HAP used, by substitution of non-HAP materials for organic HAP, or by a combination of capture and control technologies and substitution of materials. To demonstrate compliance, each owner or operator shall follow the procedure in paragraph (b)(1) of this section when emissions from the affected source are controlled by a solvent recovery device, the procedure in paragraph (b)(2) of this section when emissions from the affected source are controlled by an oxidizer, and the procedure in paragraph (b)(3) of this section when no control device is used.

(1) Each owner or operator using a solvent recovery device to control emissions shall demonstrate compliance by showing that the HAP emission limitation is achieved by following the procedures in either paragraph (b)(1)(i) or (b)(1)(ii) of this section:

(i) Perform a liquid-liquid material balance for each month as follows:

(A) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material used by the affected source during the month.

(B) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent and other material used by the affected source during the month following the procedure in §63.827(b)(1).

(C) Determine the volatile matter content, including water, of each ink, coating, varnish, adhesive, primer, solvent, and other material used by the affected source during the month following the procedure in §63.827(c)(1).

(D) Install, calibrate, maintain and operate, according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within ±2.0 percent.

(E) Measure the amount of volatile matter recovered for the month.

(F) Calculate the overall effective organic HAP control efficiency (R_e) for the month using Equation 1:

$$R_e = (100)\frac{M_{vu} - M_{ku} + \left[(M_{vr})(M_{ku}/M_{vu})\right]}{M_{vu}} \qquad Eq\ 1$$

For the purposes of this calculation, the mass fraction of organic HAP present in the recovered volatile matter is assumed to be equal to the mass fraction of organic HAP present in the volatile matter used.

(G) The affected source is in compliance for the month, if R_e is at least 92 percent each month.

(ii) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency as specified in paragraphs (b)(1)(ii)(A) through (b)(1)(ii)(E) of this section:

(A) Install continuous emission monitors to collect the data necessary to calculate the total organic volatile matter mass flow in the gas stream entering and the total organic volatile matter mass flow in the gas stream exiting the solvent recovery device for each month such that the percent control efficiency (E) of the solvent recovery device can be calculated for the month. This requires continuous emission monitoring of the total organic volatile matter concentration in the gas stream entering the solvent recovery device, the total organic volatile matter concentration in the gas stream exiting the solvent recovery device, and the volumetric gas flow rate through the solvent recovery device. A single continuous volumetric gas flow measurement should be sufficient for a solvent recovery device since the inlet and outlet volumetric gas flow rates for a solvent recovery device are essentially equal. Each month's individual inlet concentration values and corresponding individual gas flow rate values are multiplied and then summed to get the total organic volatile matter mass flow in the gas stream entering the solvent recovery device for the month. Each month's individual outlet concentration values and corresponding individual gas flow rate values are multiplied and then summed to get the total organic volatile matter mass flow in the gas stream exiting the solvent recovery device for the month.

(B) Determine the percent capture efficiency (F) of the capture system according to §63.827(e).

(C) Calculate the overall effective organic HAP control efficiency (R_e) achieved for each month using Equation 2.

$$R_e = (100)\frac{M_{vu} - M_{ku} + \left[(E/100)(F/100)M_{ku}\right]}{M_{vu}} \qquad Eq\ 2$$

(D) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with §63.828(a)(5) whenever a publication rotogravure printing press is operated.

(E) The affected source is in compliance with the requirement for the month if R_e is at least 92 percent, and the capture device is operated at an average value greater than, or less than (as appropriate) the operating parameter value established in accordance with §63.828(a)(5) for each three-hour period.

(2) Each owner or operator using an oxidizer to control emissions shall demonstrate compliance by showing that the HAP emission limitation is achieved by following the procedure in either paragraph (b)(2)(i) or (b)(2)(ii) of this section:

(i) Demonstrate initial compliance through performance tests and continuing compliance through continuous monitoring as follows:

(A) Determine the oxidizer destruction efficiency (E) using the procedure in §63.827(d).

(B) Determine the capture efficiency (F) using the procedure in §63.827(e).

(C) [Reserved]

(D) Calculate the overall effective organic HAP control efficiency (R_e) achieved using Equation 2.

(E) The affected source is in initial compliance if R_e is at least 92 percent. Demonstration of continuing compliance is achieved by continuous monitoring of an appropriate oxidizer operating parameter in accordance with §63.828(a)(4), and by continuous monitoring of an appropriate capture system monitoring parameter in accordance with §63.828(a)(5). The affected source is in continuing compliance if the capture device is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.828(a)(5), and

(*1*) if an oxidizer other than a catalytic oxidizer is used, the average combustion temperature for all three-hour periods is greater than or equal to the average combustion temperature established under §63.827(d), or

(*2*) if a catalytic oxidizer is used, the average catalyst bed inlet temperature for all three-hour periods is greater than or equal to the average catalyst bed inlet temperature established in accordance with §63.827(d).

(ii) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. The percent control efficiency of the oxidizer shall be demonstrated in accordance with the requirements of paragraph (b)(1)(ii) of this section except that separate continuous measurements of the inlet volumetric gas flow rate and the outlet volumetric gas flow rate are required for an oxidizer.

(3) To demonstrate compliance without the use of a control device, each owner or operator shall compare the mass of organic HAP used to the mass of volatile matter used each month, as specified in paragraphs (b)(3)(i) through (b)(3)(iv) of this section:

(i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material used in the affected source during the month.

(ii) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material used during the month following the procedure in §63.827(b)(1), and

(iii) Determine the volatile matter content, including water, of each ink, coating, varnish, adhesive, primer, solvent, and other material used during the month following the procedure in §63.827(c)(1).

(iv) The affected source is in compliance for the month if the mass of organic HAP used does not exceed eight percent of the mass of volatile matter used.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29801, May 24, 2006]

§63.825 Standards: Product and packaging rotogravure and wide-web flexographic printing.

(a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in §63.826 of this subpart.

(b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit organic HAP emissions to no more than 5 percent of the organic HAP applied for the month; or to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this section:

(1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with §63.827(b)(2).

(2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this section. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:

(i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with §63.827(b)(2).

(ii) Calculate the monthly average as-applied organic HAP content, C_{ahi} of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3.

$$C_{ahi} = \frac{\left(C_{hi} M_i + \sum_{j=1}^{q} C_{hij} M_{ij} \right)}{M_i + \sum_{j=1}^{q} M_{ij}} \qquad Eq\ 3$$

(3)(i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either

(A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or

(B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.

(ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this section.

(A) Use the procedures of paragraph (b)(2) of this section to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this section,

(B) Determine the as-applied solids content following the procedure in §63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this section. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, and

$$C_{asi} = \frac{C_{si} M_i}{M_i + \sum_{j=1}^{q} M_{ij}} \qquad Eq\ 4$$

(C) Calculate the as-applied organic HAP to solids ratio, H_{si}, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this section, using Equation 5.

$$H_{si} = \frac{C_{aki}}{C_{asi}} \qquad Eq\ 5$$

(4) Demonstrate that the monthly average as-applied organic HAP content, H_L, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6.

$$H_L = \frac{\sum_{i=1}^{p} M_i C_{ki} + \sum_{j=1}^{q} M_j C_{kj}}{\sum_{i=1}^{p} M_i + \sum_{j=1}^{q} M_j} \qquad Eq\ 6$$

(5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, H_s, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7.

$$H_S = \frac{\sum_{i=1}^{p} M_i C_{ki} + \sum_{j=1}^{q} M_j C_{kj}}{\sum_{i=1}^{p} M_i C_{si}} \qquad Eq\ 7$$

(6) Demonstrate that the total monthly organic HAP applied, H_{app}, as determined by Equation 8, is less than the calculated equivalent allowable organic HAP, H_a, as determined by paragraph (e) of this section.

$$H_{app} = \sum_{i=1}^{p} M_i C_{hi} + \sum_{j=1}^{q} M_j C_{hj} \qquad \text{Eq. 8}$$

Where:

H_{app} = Total monthly organic HAP applied, kg.

(7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this section. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this section. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this section when emissions are controlled by an oxidizer.

(8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this section. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this section when emissions are controlled by an oxidizer.

(9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this section. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this section when emissions are controlled by an oxidizer.

(10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this section. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this section. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this section when emissions are controlled by an oxidizer.

(c) To demonstrate compliance with the overall organic HAP control efficiency requirement in §63.825(b)(7) or the organic HAP emissions limitation requirements in §63.825(b)(8)-(10), each owner or

operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this section:

(1) Perform a liquid-liquid material balance for each and every month as follows:

(i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.

(ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(b)(2).

(iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(c)(2).

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(c)(2).

(v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within ±2.0 percent.

(vi) Measure the amount of volatile matter recovered for the month.

(vii) Calculate the volatile matter collection and recovery efficiency, R_v, using Equation 9.

$$R_v = 100\frac{M_{vr}}{\sum_{i=1}^{p} M_i C_{vi} + \sum_{j=1}^{q} M_j} \qquad Eq\ 9$$

(viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10.

$$H = \left[1 - \frac{R_v}{100}\right]\left[\sum_{i=1}^{p}\left(C_{hi} M_i + \sum_{j=1}^{q} C_{hij} M_{ij}\right)\right] \qquad Eq\ 10$$

(ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11.

$$L = \frac{H}{\sum_{i=1}^{p} C_{si} M_i} \qquad Eq\ 11$$

(x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12.

$$S = \frac{H}{\sum_{i=1}^{n}\left[M_i + \sum_{j=1}^{q} M_{ij}\right]} \qquad Eq\ 12$$

(xi) The affected source is in compliance if

(A) The organic volatile matter collection and recovery efficiency, R_v, is 95 percent or greater, or

(B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or

(C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or

(D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, H_a, as determined using paragraph (e) of this section.

(2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this section:

(i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.

(ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(b)(2).

(iii) Install continuous emission monitors to collect the data necessary to calculate the total organic volatile matter mass flow in the gas stream entering and the total organic volatile mass flow in the gas stream exiting the solvent recovery device for each month such that the percent control efficiency (E) of the solvent recovery device can be calculated for the month. This requires continuous emission monitoring of the total organic volatile matter concentration in the gas stream entering the solvent recovery device, the total organic volatile matter concentration in the gas stream exiting the solvent recovery device, and the volumetric gas flow rate through the solvent recovery device. A single continuous volumetric gas flow measurement should be sufficient for a solvent recovery device since the inlet and outlet volumetric gas flow rates for a solvent recovery device are essentially equal. Each month's individual inlet concentration values and corresponding individual gas flow rate values are multiplied and then summed to get the total organic volatile matter mass flow in the gas stream entering the solvent recovery device for the month. Each month's individual outlet concentration values and corresponding individual gas flow rate values are multiplied and then summed to get the total organic volatile matter mass flow in the gas stream exiting the solvent recovery device for the month.

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink,

coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(c)(2).

(v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with §63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.

(vi) Determine the capture efficiency (F) in accordance with §63.827(e)-(f).

(vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13.

$$R = \frac{EF}{100} \qquad Eq\ 13$$

(viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14.

$$H = \left[1 - \left(\frac{E}{100}\,\frac{F}{100}\right)\right]\left[\sum_{i=1}^{p}\left(C_{ki}M_i + \sum_{j=1}^{q} C_{kij}M_{ij}\right)\right] \qquad Eq\ 14$$

(ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15.

$$L = \frac{H}{\sum_{i=1}^{p} C_{si}M_i} \qquad Eq\ 15$$

(x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16.

$$S = \frac{H}{\sum_{i=1}^{p}\left[M_i + \sum_{j=1}^{q} M_{ij}\right]} \qquad Eq\ 16$$

(xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.828(a)(5) for each three hour period, and

(A) The organic volatile matter collection and recovery efficiency, R_v, is 95 percent or greater, or

(B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or

(C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or

(D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, H_a, as determined using paragraph (e) of this section.

(d) To demonstrate compliance with the overall organic HAP control efficiency requirement in §63.825(b)(7) or the overall organic HAP emission rate limitation requirements in §63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this section:

(1) Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this section:

(i) Determine the oxidizer destruction efficiency (E) using the procedure in §63.827(d).

(ii) Determine the capture system capture efficiency (F) in accordance with §63.827(e)-(f).

(iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13.

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(b)(2).

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in §63.827(c)(2).

(vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14.

(viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15.

(ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16.

(x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with §63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.

(xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with §63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an

average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.828(a)(5) for each three hour period, and

(A) The overall organic HAP control efficiency, R, is 95 percent or greater, or

(B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or

(C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or

(D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, H_a, as determined using paragraph (e) of this section.

(2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. The percent control efficiency of the oxidizer shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this section except that separate continuous volumetric gas flow measurements of the inlet and outlet volumetric gas flow rates are required for an oxidizer.

(e) Owners or operators may calculate the monthly allowable HAP emissions, H_a, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this section as follows:

(1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, M_i.

(2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with §63.827(c)(2), C_{si}.

(3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, G_i.

(4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, M_{Lj}.

(5) Calculate the monthly allowable HAP emissions, H_a, using Equation 17.

$$H_a = 0.20\left[\sum_{i=1}^{p} M_i G_i C_{si}\right] + 0.04\left[\sum_{i=1}^{p} M_i\left(1 - G_i\right) + \sum_{j=1}^{q} M_{Lj}\right] \qquad Eq\ 17$$

(f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this section if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.

(1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either

(i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this section if the presses controlled by that solvent recovery system have only always-controlled work stations, or

(ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this section if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.

(2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall

(i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with §63.828(a)(5) to assure capture system efficiency, and

(ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either

(A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this section if the presses served by that capture system have only always-controlled work stations, or

(B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this section if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.

(3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall

(i) Monitor an operating parameter established in accordance with §63.828(a)(4) to assure control device efficiency, and

(ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with §63.828(a)(5) to assure capture efficiency, and

(iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either

(A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this section if the presses served by that capture system have only always-controlled work stations, or

(B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this section if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.

(4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall

(i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with §63.828(a)(5) to assure capture efficiency, and

(ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either

(A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this section if the presses served by that capture system have only always-controlled work stations, or

(B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this section if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.

(5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.

(6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in §63.827(c)(2).

(7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this section. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this section were maintained at the appropriate values, and

(i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or

(ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or

(iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, H_a, calculated in accordance with paragraph (e) of this section, or

(iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8.

(g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this section shall for that press or group of presses:

(1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, M_{Bi}.

(2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, M_{Bj}.

(3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, M_{Bj}.

(4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, M_{Cj}.

(5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this section, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18.

$$H = \left[\sum_{i=1}^{p} M_{Ci} C_{hi} + \sum_{j=1}^{q} M_{Cj} C_{hj}\right]\left[1 - \frac{M_{nr}}{\sum_{i=1}^{p} M_{Ci} C_{vi} + \sum_{j=1}^{q} M_{Cj}}\right] + \left[\sum_{i=1}^{p} M_{Bi} C_{hi} + \sum_{j=1}^{q} M_{Bj} C_{hj}\right] \qquad Eq\ 18$$

(6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this section, the owner or operator shall calculate the organic HAP emitted during the month using Equation (19).

$$H = \left[\sum_{i=1}^{p} M_{Ci} C_{hi} + \sum_{j=1}^{q} M_{Cj} C_{hj}\right]\left[1 - \left(\frac{E}{100}\,\frac{F}{100}\right)\right] + \left[\sum_{i=1}^{p} M_{Bi} C_{hi} + \sum_{j=1}^{q} M_{Bj} C_{hj}\right] \qquad Eq\ 19$$

(h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:

(1) The volatile matter collection and recovery efficiency, R_v, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this section is equal to or greater than 95 percent, or

(2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this section for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with §63.828(a)(5) for each three hour period, or

(3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this section for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with §63.828(a)(4) for each three hour period, and the average capture system operating parameter value for

each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with §63.828(a)(5) for each three hour period.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29801, May 24, 2006]

§63.826 Compliance dates.

(a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.

(b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.

(c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

§63.827 Performance test methods.

Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(a) An owner or operator using a control device to comply with the requirements of §§63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this section are met:

(1) A control device that is in operation prior to May 30, 1996, does not need to be tested if

(i) It is equipped with continuous emission monitors for determining total organic volatile matter concentration and the volumetric gas flow rate, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall organic HAP control efficiency can be calculated, and

(ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with §63.824(b)(1)(ii), §63.825(b)(2)(ii), §63.825(c)(2), or §63.825(d)(2), as applicable, and §63.828, or

(2) The owner or operator has met the requirements of either §63.7(e)(2)(iv) or §63.7(h), or

(3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.

(b) Determination of the weight fraction organic HAP of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials used by a publication rotogravure affected source shall be conducted according to paragraph (b)(1) of this section. Determination of the weight fraction organic HAP of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials applied by a product and packaging rotogravure or wide-web flexographic printing affected source shall be conducted according to paragraph (b)(2) of this section. If the weight

fraction organic HAP values are not determined using the procedures in paragraphs (b)(1) or (b)(2) of this section, the owner or operator must submit an alternative test method for determining their values for approval by the Administrator in accordance with §63.7(f). The recovery efficiency of the test method must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

(1) Each owner or operator of a publication rotogravure affected source shall determine the weight fraction organic HAP of each ink, coating, varnish, adhesive, primer, solvent, and other material used by following one of the procedures in paragraphs (b)(1)(i) through (iii) of this section:

(i) The owner or operator may test the material in accordance with Method 311 of appendix A of this part. The Method 311 determination may be performed by the owner or operator of the affected source, the supplier of the material, or an independent third party. The organic HAP content determined by Method 311 must be calculated according to the criteria and procedures in paragraphs (b)(1)(i)(A) through (C) of this section.

(A) Include each organic HAP determined to be present at greater than or equal to 0.1 weight percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds.

(B) Express the weight fraction of each organic HAP included according to paragraph (b)(1)(i)(A) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(C) Calculate the total weight fraction of organic HAP in the tested material by summing the weight fraction of each organic HAP included according to paragraph (b)(1)(i)(A) of this section and truncating the result to three places after the decimal point (for example, 0.763).

(ii) The owner or operator may determine the weight fraction volatile matter of the material in accordance with §63.827(c)(1) and use this value for the weight fraction organic HAP for all compliance purposes.

(iii) The owner or operator may use formulation data to determine the weight fraction organic HAP of a material. Formulation data may be provided to the owner or operator on a CPDS by the supplier of the material or an independent third party. Formulation data may be used provided that the weight fraction organic HAP is calculated according to the criteria and procedures in paragraphs (b)(1)(iii)(A) through (D) of this section. In the event of an inconsistency between the formulation data and the result of Method 311 of appendix A of this part, where the test result is higher, the Method 311 data will take precedence unless, after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(A) For each raw material used in making the material, include each organic HAP present in that raw material at greater than or equal to 0.1 weight percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds. The weight fraction of each such organic HAP in each raw material must be determined by Method 311 of appendix A of this part, by an alternate method approved by the Administrator, or from a CPDS provided by the raw material supplier or an independent third party. The weight fraction of each such organic HAP in each raw material must be expressed as a value truncated to four places after the decimal point (for example, 0.1291).

(B) For each raw material used in making the material, the weight fraction contribution of each organic HAP, which is included according to paragraph (b)(1)(iii)(A) of this section, in that raw material to the weight fraction organic HAP of the material is calculated by multiplying the weight fraction, truncated to four places after the decimal point (for example, 0.1291), of that organic HAP in that raw material times

the weight fraction of that raw material, truncated to four places after the decimal point (for example, 0.2246), in the material. The product of each such multiplication is to be truncated to four places after the decimal point (for example, 0.1291 times 0.2246 yields 0.02899586 which truncates to 0.0289).

(C) For each organic HAP which is included according to paragraph (b)(1)(iii)(A) of this section, the total weight fraction of that organic HAP in the material is calculated by adding the weight fraction contribution of that organic HAP from each raw material in which that organic HAP is included according to paragraph (b)(1)(iii)(A) of this section. The sum of each such addition must be expressed to four places after the decimal point.

(D) The total weight fraction of organic HAP in the material is the sum of the counted individual organic HAP weight fractions. This sum must be truncated to three places after the decimal point (for example, 0.763).

(2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing affected source shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (iii) of this section:

(i) The owner or operator may test the material in accordance with Method 311 of appendix A of this part. The Method 311 determination may be performed by the owner or operator of the affected source, the supplier of the material, or an independent third party. The organic HAP content determined by Method 311 must be calculated according to the criteria and procedures in paragraphs (b)(2)(i)(A) through (C) of this section.

(A) Include each organic HAP determined to be present at greater than or equal to 0.1 weight percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds.

(B) Express the weight fraction of each organic HAP included according to paragraph (b)(2)(i)(A) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(C) Calculate the total weight fraction of organic HAP in the tested material by summing the weight fraction of each organic HAP included according to paragraph (b)(2)(i)(A) of this section and truncating the result to three places after the decimal point (for example, 0.763).

(ii) The owner or operator may determine the weight fraction volatile matter of the material in accordance with §63.827(c)(2) and use this value for the weight fraction organic HAP for all compliance purposes.

(iii) The owner or operator may use formulation data to determine the weight fraction organic HAP of a material. Formulation data may be provided to the owner or operator on a CPDS by the supplier of the material or an independent third party. Formulation data may be used provided that the weight fraction organic HAP is calculated according to the criteria and procedures in paragraphs (b)(2)(iii)(A) through (D) of this section. In the event of an inconsistency between the formulation data and the result of Method 311 of appendix A of this part, where the test result is higher, the Method 311 data will take precedence unless, after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(A) For each raw material used in making the material, include each organic HAP present in that raw material at greater than or equal to 0.1 weight percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 weight percent for other organic HAP compounds. The weight fraction of each such organic HAP in each raw material must be determined by Method 311 of appendix A of this part, by an alternate method approved by the Administrator, or from a CPDS provided

by the raw material supplier or an independent third party. The weight fraction of each such organic HAP in each raw material must be expressed as a value truncated to four places after the decimal point (for example, 0.1291).

(B) For each raw material used in making the material, the weight fraction contribution of each organic HAP, which is included according to paragraph (b)(2)(iii)(A) of this section, in that raw material to the weight fraction organic HAP of the material is calculated by multiplying the weight fraction, truncated to four places after the decimal point (for example, 0.1291), of that organic HAP in that raw material times the weight fraction of that raw material, truncated to four places after the decimal point (for example, 0.2246), in the material. The product of each such multiplication is truncated to four places after the decimal point (for example, 0.1291 times 0.2246 yields 0.02899586 which truncates to 0.0289).

(C) For each organic HAP which is included according to paragraph (b)(2)(iii)(A) of this section, the total weight fraction of that organic HAP in the material is calculated by adding the weight fraction contribution of that organic HAP from each raw material in which that organic HAP is included according to paragraph (b)(2)(iii)(A) of this section. The sum of each such addition must be expressed to four places after the decimal point.

(D) The total weight fraction of organic HAP in the material is the sum of the counted individual organic HAP weight fractions. This sum is to be truncated to three places after the decimal point (for example, 0.763).

(c) Determination of the weight fraction volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used by a publication rotogravure affected source shall be conducted according to paragraph (c)(1) of this section. Determination of the weight fraction volatile matter content and weight fraction solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied by a product and packaging rotogravure or wide-web flexographic printing affected source shall be conducted according to paragraph (c)(2) of this section.

(1) Each owner or operator of a publication rotogravure affected source shall determine the volatile matter weight fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used by following the procedures in paragraph (b)(1)(i) of this section, or by using formulation data as described in paragraph (c)(3) of this section.

(i) Determine the volatile matter weight fraction of the material using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the owner or operator of the affected source, the supplier of the material, or an independent third party. The Method 24A result shall be truncated to three places after the decimal point (for example, 0.763). If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator.

(2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing affected source shall determine the volatile matter weight fraction and solids weight fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied by following the procedures in paragraphs (b)(2)(i) and (ii) of this section, or by using formulation data as described in paragraph (c)(3) of this section.

(i) Determine the volatile matter weight fraction of the material using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the owner or operator of the affected source, the supplier of the material, or an independent third party. The Method 24 result shall be truncated to three places after the decimal point (for example, 0.763). If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator.

(ii) Calculate the solids weight fraction Method 24 result by subtracting the volatile matter weight fraction Method 24 result from 1.000. This calculation may be performed by the owner or operator, the supplier of the material, or an independent third party.

(3) The owner or operator may use formulation data to determine the volatile matter weight fraction or solids weight fraction of a material. Formulation data may be provided to the owner or operator on a CPDS by the supplier of the material or an independent third party. The volatile matter weight fraction and solids weight fraction shall be truncated to three places after the decimal point (for example, 0.763). In the event of any inconsistency between the formulation data and the result of Method 24 or Method 24A of 40 CFR part 60, appendix A, where the test result for volatile matter weight fraction is higher or the test result for solids weight fraction is lower, the applicable test method data will take precedence unless, after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of §§63.824-63.825 shall be conducted by the owner or operator in accordance with the following:

(1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:

(i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.

(ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.

(iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.

(iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.

(v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.

(vi) Method 25 of 40 CFR part 60, appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A) through (D) of this section. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under §63.7(c). The same method must be used for both the inlet and outlet measurements. The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less as carbon is required to comply with the standards of §§63.824-63.825, or

(B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less as carbon, or

(C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less as carbon, regardless of inlet concentration, or

(D) The control device is not an oxidizer.

(vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.

(viii) Organic volatile matter mass flow rates shall be determined using Equation 20:

$$M_f = Q_{sd} C_c [12.0] [0.0416] [10^{-4}] \qquad \text{Eq. 20}$$

Where:

M_f = Total organic volatile matter mass flow rate, kg/hour (h).

Q_{sd} = Volumetric flow rate of gases entering or exiting the control device, as determined according to §63.827(d)(1)(ii), dry standard cubic meters (dscm)/h.

C_c = Concentration of organic compounds as carbon, ppmv.

12.0 = Molecular weight of carbon.

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(ix) Emission control device efficiency shall be determined using Equation 21:

$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \qquad Eq\ 21$$

(2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of §§63.824-63.825.

(e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control device for the purpose of meeting the requirements of §63.824(b)(1)(ii), §63.824(b)(2), §63.825(c)(2), §63.825(d)(1)-(2), §63.825(f)(2)-(4), or §63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:

(1) You may assume your capture efficiency equals 100 percent if your capture system is a permanent total enclosure (PTE). You must confirm that your capture system is a PTE by demonstrating that it meets the requirements of section 6 of Method 204 of 40 CFR part 51, appendix M, and that all exhaust gases from the enclosure are delivered to a control device.

(2) You may determine capture efficiency according to the protocols for testing with temporary total enclosures that are specified in Methods 204 and 204A through F of 40 CFR part 51, appendix M. You may exclude never controlled work stations from such capture efficiency determinations.

(f) As an alternative to the procedures specified in §63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29802, May 24, 2006; 76 FR 22598, Apr. 21, 2011]

§63.828 Monitoring requirements.

(a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with §§63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this section.

(1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this section for each dryer associated with such a work station:

(i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.

(ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.

(iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.

(iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.

(2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this section, as applicable.

(i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.

(ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.

(3) An owner or operator complying with §§63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure total organic volatile matter concentration and volumetric gas flow rate in accordance with §63.824(b)(1)(ii), §63.825(b)(2)(ii), §63.825(c)(2), or §63.825(d)(2), as applicable.

(4) An owner or operator complying with the requirements of §§63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:

(i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.

(ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in °C or ±1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.

(5) An owner or operator complying with the requirements of §§63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:

(i) Submit to the Administrator with the compliance status report required by §63.9(h) of the General Provisions, a plan that

(A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,

(B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and

(C) Identifies the specific monitoring procedures;

(ii) Set the operating parameter value, or range of values, that demonstrate compliance with §§63.824-63.825, and

(iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this section, unless otherwise excused, shall be considered a violation of the emission standard.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29804, May 24, 2006]

§63.829 Recordkeeping requirements.

(a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart.

(b) Each owner or operator of an affected source subject to this subpart shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this section on a monthly basis in accordance with the requirements of §63.10(b)(1) of this part:

(1) Records specified in §63.10(b)(2) of this part, of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.

(2) Records specified in §63.10(b)(3) of this part for each applicability determination performed by the owner or operator in accordance with the requirements of §63.820(a) of this subpart, and

(3) Records specified in §63.10(c) of this part for each continuous monitoring system operated by the owner or operator in accordance with the requirements of §63.828(a) of this subpart.

(c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of §§63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of §63.10(b) of this part.

(d) The owner or operator of each facility which commits to the criteria of §63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.

(e) The owner or operator of each facility which meets the limits and criteria of §63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this section. The owner or operator of each facility which meets the limits and criteria of §63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this section. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.

(1) For each facility which meets the criteria of §63.821(b)(1), the owner or operator shall maintain records of the total mass of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.

(2) For each facility which meets the criteria of §63.821(b)(2), the owner or operator shall maintain records of the total mass and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.

(f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of §63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this section for five years and submit them to the Administrator upon request:

(1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and

(2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

(g) Each owner or operator of an affected source subject to this subpart shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment), air pollution control equipment, or monitoring equipment.

(h) Each owner or operator of an affected source subject to this subpart shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.823(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29804, May 24, 2006; 76 FR 22598, Apr. 21, 2011]

§63.830 Reporting requirements.

(a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart.

(b) Each owner or operator of an affected source subject to this subpart shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this section to the Administrator:

(1) An initial notification required in §63.9(b).

(i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in §63.826(a).

(ii) Initial notifications for new and reconstructed sources shall be submitted as required by §63.9(b).

(iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.

(iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.

(2) A Notification of Performance Tests specified in §§63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under §63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.

(3) A Notification of Compliance Status specified in §63.9(h) of this part.

(4) Performance test reports specified in §63.10(d)(2) of this part.

(5) [Reserved]

(6) A summary report specified in §63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every 6-month period). These summary reports are required even if the affected source does not have any control devices or does not take the performance of any control devices into account in demonstrating compliance with the emission limitations in §63.824 or §63.825. In addition to a report of

operating parameter exceedances as required by §63.10(e)(3)(i), the summary report shall include, as applicable:

(i) Exceedances of the standards in §§63.824-63.825.

(ii) Exceedances of either of the criteria of §63.820(a)(2).

(iii) Exceedances of the criterion of §63.821(b)(1) and the criterion of §63.821(b)(2) in the same month.

(iv) Exceedances of the criterion of §63.821(a)(2)(ii)(A).

(v) The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.823(b), including actions taken to correct a malfunction.

(c)(1) As of January 1, 2012, and within 60 days after the date of completing each performance test, as defined in §63.2 and as required in this subpart, you must submit performance test data, except opacity data, electronically to EPA's Central Data Exchange by using the ERT (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

(2) All reports required by this subpart not subject to the requirements in paragraph (c)(1) of this section must be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the owner or operator of a source, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to paragraph (c)(1) of this section in paper format.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29804, May 24, 2006; 76 FR 22598, Apr. 21, 2011]

§63.831 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.820 through 63.821 and 63.823 through 63.826.

(2) Approval of alternatives to the test method for organic HAP content determination in §63.827(b) and alternatives to the test method for volatile matter in §63.827(c), and major alternatives to other test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37354, June 23, 2003]

§§63.832-63.839 [Reserved]

Table 1 to Subpart KK of Part 63—Applicability of General Provisions to Subpart KK

General provisions reference	Applicable to subpart KK	Comment
§63.1(a)(1)-(a)(4)	Yes.	
§63.1(a)(5)	No	Section reserved.
§63.1(a)(6)-(a)(8)	No.	
§63.1(a)(9)	No	Section reserved.
§63.1(a)(10)-(a)(14)	Yes.	
§63.1(b)(1)	No	Subpart KK specifies applicability.
§63.1(b)(2)-(b)(3)	Yes.	
§63.1(c)(1)	Yes.	
§63.1(c)(2)	No	Area sources are not subject to subpart KK.
§63.1(c)(3)	No	Section reserved.
§63.1(c)(4)	Yes.	
§63.1(c)(5)	No.	
§63.1(d)	No	Section reserved.
§63.1(e)	Yes.	
§63.2	Yes	Additional definitions in subpart KK.
§63.3(a)-(c)	Yes.	
§63.4(a)(1)-(a)(3)	Yes.	
§63.4(a)(4)	No	Section reserved.
§63.4(a)(5)	Yes.	
§63.4(b)-(c)	Yes.	
§63.5(a)(1)-(a)(2)	Yes.	

§63.5(b)(1)	Yes.	
§63.5(b)(2)	No	Section reserved.
§63.5(b)(3)-(b)(6)	Yes.	
§63.5(c)	No	Section reserved.
§63.5(d)	Yes.	
§63.5(e)	Yes.	
§63.5(f)	Yes.	
§63.6(a)	Yes.	
§63.6(b)(1)-(b)(5)	Yes.	
§63.6(b)(6)	No	Section reserved.
§63.6(b)(7)	Yes.	
§63.6(c)(1)-(c)(2)	Yes.	
§63.6(c)(3)-(c)(4)	No	Sections reserved.
§63.6(c)(5)	Yes.	
§63.6(d)	No	Section reserved.
§63.6(e)(1)(i)	No	See 63.823(b) for general duty requirement. Any cross-reference to 63.6(e)(1)(i) in any other general provision incorporated by reference shall be treated as a cross-reference to 63.823(b).
§63.6(e)(1)(ii)	No	
§63.6(e)(1)(iii)	Yes.	
§63.6(e)(2)	No	Section reserved.
§63.6(e)(3)	No	
§63.6(f)(1)	No	
§63.6(f)(2)-(f)(3)	Yes.	
§63.6(g)	Yes.	
§63.6(h)	No	Subpart KK does not require COMS.
§63.6(i)(1)-(i)(14)	Yes.	
§63.6(i)(15)	No	Section reserved.
§63.6(i)(16)	Yes.	
§63.6(j)	Yes.	
§63.7(a)-(d)	Yes.	
§63.7(e)(1)	No	See 63.827 introductory text. Any cross-reference to 63.7(e)(1) in any other general provision incorporated by reference shall be treated as a cross-reference to 63.827 introductory text.
§63.7(e)(2)-(e)(4)	Yes.	

§63.8(a)(1)-(a)(2)	Yes.	
§63.8(a)(3)	No	Section reserved.
§63.8(a)(4)	No	Subpart KK specifies the use of solvent recovery devices or oxidizers.
§63.8(b)	Yes.	
§63.8(c)(1)-(3)	Yes.	
§63.8(c)(4)	No	Subpart KK specifies CMS sampling requirements.
§63.8(c)(5)	No	Subpart KK does not require COMS.
§63.8(c)(6)-(c)(8)	Yes	Provisions for COMS are not applicable.
§63.8(d)(1)-(2)	Yes.	
§63.8(d)(3)	Yes, except for last sentence.	
§63.8(e)-(f)	Yes.	
§63.8(g)	No	Subpart KK specifies CMS data reduction requirements.
§63.9(a)	Yes.	
§63.9(b)(1)	Yes.	
§63.9(b)(2)	Yes	Initial notification submission date extended.
§63.9(b)(3)-(b)(5)	Yes.	
§63.9(c)-(e)	Yes.	
§63.9(f)	No	Subpart KK does not require opacity and visible emissions observations.
§63.9(g)	Yes	Provisions for COMS are not applicable.
§63.9(h)(1)-(h)(3)	Yes.	
§63.9(h)(4)	No	Section reserved.
§63.9(h)(5)-(h)(6)	Yes.	
§63.9(i)	Yes.	
§63.9(j)	Yes.	
§63.10(a)	Yes.	
§63.10(b)(1)	Yes.	
§63.10(b)(2)(i)	No.	
§63.10(b)(2)(ii)	No	See 63.829(g) for recordkeeping of occurrence and duration of malfunctions. See 63.829(h) for recordkeeping of actions taken during malfunction. Any cross-reference to 63.10(b)(2)(ii) in any other general provision incorporated by reference shall be treated as a cross-reference to 63.829(g).
§63.10(b)(2)(iii)	Yes.	
§63.10(b)(2)(iv)-	No.	

(b)(2)(v)		
§63.10(b)(2)(vi)-(b)(2)(xiv)	Yes.	
§63.10(b)(3)	Yes.	
§63.10(c)(1)	Yes.	
§63.10(c)(2)-(c)(4)	No	Sections reserved.
§63.10(c)(5)-(c)(8)	Yes.	
§63.10(c)(9)	No	Section reserved.
§63.10(c)(10)	No	See 63.830(b)(6)(v) for reporting malfunctions. Any cross-reference to 63.10(c)(10) in any other general provision incorporated by reference shall be treated as a cross-reference to 63.830(b)(6)(v).
§63.10(c)(11)	No	See 63.830(b)(6)(v) for reporting malfunctions. Any cross-reference to 63.10(c)(11) in any other general provision incorporated by reference shall be treated as a cross-reference to 63.830(b)(6)(v).
§63.10(c)(12)-(c)(14)	Yes.	
§63.10(c)(15)	No.	
§63.10(d)(1)-(d)(2)	Yes.	
§63.10(d)(3)	No	Subpart KK does not require opacity and visible emissions observations.
§63.10(d)(4)	Yes.	
§63.10(d)(5)	No.	
§63.10(e)	Yes	Provisions for COMS are not applicable.
§63.10(f)	Yes.	
§63.11	No	Subpart KK specifies the use of solvent recovery devices or oxidizers.
§63.12	Yes.	
§63.13	Yes.	
§63.14	Yes.	
§63.15	Yes.	

[61 FR 27140, May 30, 1996, as amended at 76 FR 22598, Apr. 21, 2011]

Appendix A to Subpart KK of Part 63—Data Quality Objective and Lower Confidence Limit Approaches for Alternative Capture Efficiency Protocols and Test Methods

1. Introduction

1.1 Alternative capture efficiency (CE) protocols and test methods that satisfy the criteria of either the data quality objective (DQO) approach or the lower confidence limit (LCL) approach are acceptable under §63.827(f). The general criteria for alternative CE protocols and test methods to qualify under either the DQO or LCL approach are described in section 2. The DQO approach and criteria specific to the

DQO approach are described in section 3. The LCL approach and criteria specific to the LCL approach are described in section 4. The recommended reporting for alternative CE protocols and test methods are presented in section 5. The recommended recordkeeping for alternative CE protocols and test methods are presented in section 6.

1.2 Although the Procedures L, G.1, G.2, F.1, and F.2 in §52.741 of part 52 were developed for TTE and BE testing, the same procedures can also be used in an alternative CE protocol. For example, a traditional liquid/gas mass balance CE protocol could employ Procedure L to measure liquid VOC input and Procedure G.1 to measure captured VOC.

2. General Criteria for DQO and LCL Approaches

2.1 The following general criteria must be met for an alternative capture efficiency protocol and test methods to qualify under the DQO or LCL approach.

2.2 An alternative CE protocol must consist of at least three valid test runs. Each test run must be at least 20 minutes long. No test run can be longer than 24 hours.

2.3 All test runs must be separate and independent. For example, liquid VOC input and output must be determined independently for each run. The final liquid VOC sample from one run cannot be the initial sample for another run. In addition, liquid input for an entire day cannot be apportioned among test runs based on production.

2.4 Composite liquid samples cannot be used to obtain an “average composition” for a test run. For example, separate initial and final coating samples must be taken and analyzed for each run; initial and final samples cannot be combined prior to analysis to derive an “average composition” for the test run.

2.5 All individual test runs that result in a CE of greater than 105 percent are invalid and must be discarded.

2.6 If the source can demonstrate to the regulatory agency that a test run should not be considered due to an identified testing or analysis error such as spillage of part of the sample during shipping or an upset or improper operating conditions that is not considered part of normal operation then the test result for that individual test run may be discarded. This limited exception allows sources to discard as “outliers” certain individual test runs without replacing them with a valid test run as long as the facility has at least three valid test runs to use when calculating its DQO or LCL. This exception is limited solely to test runs involving the types of errors identified above.

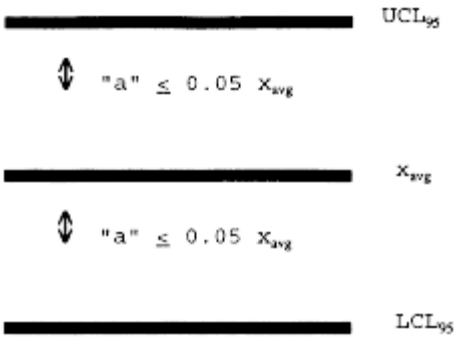
2.7 All valid test runs that are conducted must be included in the average CE determination. The individual test run CE results and average CE results cannot be truncated (i.e., 105 percent cannot be reported as 100+ percent) for purposes of meeting general or specific criteria for either the DQO or the LCL. If the DQO is satisfied and the average CE is greater than 100, then 100 percent CE must be considered the result of the test.

2.8 Alternative test methods for measuring VOC concentration must include a three-point calibration of the gas analysis instrument in the expected concentration range.

3. Data Quality Objective Approach

3.1 The purpose of the DQO is to allow sources to use alternative CE protocols and test methods while ensuring reasonable precision consistent with pertinent requirements of the Clean Air Act. In addition to the general criteria described in section 2, the specific DQO criterion is that the width of the two-sided 95 percent confidence interval of the mean measured value must be less than or equal to 10

percent of the mean measured value (see Figure 1). This ensures that 95 percent of the time, when the DQO is met, the actual CE value will be ±5 percent of the mean measured value (assuming that the test protocol is unbiased).



3.2 The DQO calculation is made as follows using Equations 1 and 2:

$$P = \left[\frac{a}{x_{avg}}\right]100 \qquad \text{Eq. 1}$$

$$a = \frac{t_{0.975}s}{\sqrt{n}} \qquad \text{Eq. 2}$$

Where:

a = Distance from the average measured CE value to the endpoints of the 95-percent (two-sided) confidence interval for the measured value.

n = Number of valid test runs.

P = DQO indicator statistic, distance from the average measured CE value to the endpoints of the 95-percent (two-sided) confidence interval, expressed as a percent of the average measured CE value.

s = Sample standard deviation.

$t_{0.975}$ = t-value at the 95-percent (two-sided) confidence level (see Table A-1).

x_{avg} = Average measured CE value (calculated from all valid test runs).

x_i = The CE value calculated from the ith test run.

TABLE A-1—T-VALUES

Number of valid test runs, n	**$t_{0.975}$**	**$t_{0.90}$**
1 or 2	N/A	N/A
3	4.303	1.886
4	3.182	1.638
5	2.776	1.533

6	2.571	1.476
7	2.447	1.440
8	2.365	1.415
9	2.306	1.397
10	2.262	1.383
11	2.228	1.372
12	2.201	1.363
13	2.179	1.356
14	2.160	1.350
15	2.145	1.345
16	2.131	1.341
17	2.120	1.337
18	2.110	1.333
19	2.101	1.330
20	2.093	1.328
21	2.086	1.325

3.3 The sample standard deviation and average CE value are calculated using Equations 3 and 4 as follows:

$$s = \left[\frac{\sum_{i=1}^{n} \left(x_i - x_{avg} \right)^2}{n-1} \right]^{0.5} \qquad Eq\ 3$$

$$x_{avg} = \frac{\sum_{i=1}^{n} x_i}{n} \qquad Eq\ 4$$

3.4 The DQO criteria are achieved when all of the general criteria in section 2 are achieved and P ≤5 percent (i.e., the specific DQO criterion is achieved). In order to meet this objective, facilities may have to conduct more than three test runs. Examples of calculating P, given a finite number of test runs, are shown below. (For purposes of this example it is assumed that all of the general criteria are met.)

3.5 Facility A conducted a CE test using a traditional liquid/gas mass balance and submitted the following results and the calculations shown in Equations 5 and 6:

Run	**CE**
1	96.1

2	105.0
3	101.2

Therefore:

n=3

$t_{0.975}$=4.30

x_{avg}=100.8

s=4.51

$$a = \frac{(4.30)(4.51)}{\sqrt{n}} = 11.20 \qquad Eq\ 5$$

$$P = \frac{11.2}{100.8}100 = 11.11 \qquad Eq\ 6$$

3.6 Since the facility did not meet the specific DQO criterion, they ran three more test runs.

Run	**CE**
4	93.2
5	96.2
6	87.6

3.7 The calculations for Runs 1-6 are made as follows using Equations 7 and 8:

n=6

$t_{0.975}$=2.57

x_{avg}=96.6

s=6.11

$$a = \frac{(2.57)(6.11)}{\sqrt{6}} = 6.41 \qquad Eq\ 7$$

$$P = \frac{6.41}{96.6}100 = 6.64 \qquad Eq\ 8$$

3.8 The facility still did not meet the specific DQO criterion. They ran three more test runs with the following results:

Run	**CE**
7	92.9

8	98.3
9	91.0

3.9 The calculations for Runs 1-9 are made as follows using Equations 9 and 10:

n=9

$t_{0.975}$=2.31

x_{avg}=95.7

s=5.33

$$a = \frac{(2.31)(5.33)}{\sqrt{9}} = 4.10 \qquad Eq\ 9$$

$$P = \frac{4.10}{95.7}100 = 4.28 \qquad Eq\ 10$$

3.10 Based on these results, the specific DQO criterion is satisfied. Since all of the general criteria were also satisfied, the average CE from the nine test runs can be used to determine compliance.

4. Lower Confidence Limit Approach

4.1 The purpose of the LCL approach is to provide sources, that may be performing much better than their applicable regulatory requirement, a screening option by which they can demonstrate compliance. The approach uses less precise methods and avoids additional test runs which might otherwise be needed to meet the specific DQO criterion while still being assured of correctly demonstrating compliance. It is designed to reduce “false positive” or so called “Type II errors” which may erroneously indicate compliance where more variable test methods are employed. Because it encourages CE performance greater than that required in exchange for reduced compliance demonstration burden, the sources that successfully use the LCL approach could produce emission reductions beyond allowable emissions. Thus, it could provide additional benefits to the environment as well.

4.2 The LCL approach compares the 80 percent (two-sided) LCL for the mean measured CE value to the applicable CE regulatory requirement. In addition to the general criteria described in section 2, the specific LCL criteria are that either the LCL be greater than or equal to the applicable CE regulatory requirement or that the specific DQO criterion is met. A more detailed description of the LCL approach follows:

4.3 A source conducts an initial series of at least three runs. The owner or operator may choose to conduct additional test runs during the initial test if desired.

4.4 If all of the general criteria are met and the specific DQO criterion is met, then the average CE value is used to determine compliance.

4.5 If the data meet all of the general criteria, but do not meet the specific DQO criterion; and the average CE, using all valid test runs, is above 100 percent then the test sequence cannot be used to calculate the LCL. At this point the facility has the option of (a) conducting more test runs in hopes of meeting the DQO or of bringing the average CE for all test runs below 100 percent so the LCL can be used or (b) discarding all previous test data and retesting.

4.6 The purpose of the requirement in Section 4.5 is to protect against protocols and test methods which may be inherently biased high. This is important because it is impossible to have an actual CE greater than 100 percent and the LCL approach only looks at the lower end variability of the test results. This is different from the DQO which allows average CE values up to 105 percent because the DQO sets both upper and lower limits on test variability.

4.7 If at any point during testing the results meet the DQO, the average CE can be used for demonstrating compliance with the applicable regulatory requirement. Similarly, if the average CE is below 100 percent then the LCL can be used for demonstrating compliance with the applicable regulatory requirement without regard to the DQO.

4.8 The LCL is calculated at an 80 percent (two-sided) confidence level as follows using Equation 11:

$$LC_1 = x_{avg} - \frac{t_{0.90}\, s}{\sqrt{n}} \qquad \text{Eq. 11}$$

Where:

LC_1 = LCL at an 80-percent (two-sided) confidence level.

n = Number of valid test runs.

s = Sample standard deviation.

$t_{0.90}$ = t-value at the 80-percent (two-sided) confidence level (see Table A-1).

x_{avg} = Average measured CE value (calculated from all valid test runs).

4.9 The resulting LC_1 is compared to the applicable CE regulatory requirement. If LC_1 exceeds (i.e., is higher than) the applicable regulatory requirement, then a facility is in initial compliance. However, if the LC_1 is below the CE requirement, then the facility must conduct additional test runs. After this point the test results will be evaluated not only looking at the LCL, but also the DQO of ±5 percent of the mean at a 95 percent confidence level. If the test results with the additional test runs meet the DQO before the LCL exceeds the applicable CE regulatory requirement, then the average CE value will be compared to the applicable CE regulatory requirement for determination of compliance.

4.10 If there is no specific CE requirement in the applicable regulation, then the applicable CE regulatory requirement is determined based on the applicable regulation and an acceptable destruction efficiency test. If the applicable regulation requires daily compliance and the latest CE compliance demonstration was made using the LCL approach, then the calculated LC_1 will be the highest CE value which a facility is allowed to claim until another CE demonstration test is conducted. This last requirement is necessary to assure both sufficiently reliable test results in all circumstances and the potential environmental benefits referenced above.

4.11 An example of calculating the LCL is shown below. Facility B's applicable regulatory requirement is 85 percent CE. Facility B conducted a CE test using a traditional liquid/gas mass balance and submitted the following results and the calculation shown in Equation 12:

Run	**CE**
1	94.2
2	97.6

3	90.5

Therefore:

n=3

$t_{0.90}$=1.886

x_{avg}=94.1

s=3.55

$$LC_1 = 94.1 - \frac{(1.886)(3.55)}{\sqrt{3}} = 90.23 \qquad Eq\ 12$$

4.12 Since the LC_1 of 90.23 percent is above the applicable regulatory requirement of 85 percent then the facility is in compliance. The facility must continue to accept the LC_1 of 90.23 percent as its CE value until a new series of valid tests is conducted. (The data generated by Facility B do not meet the specific DQO criterion.)

5. Recommended Reporting for Alternative CE Protocols

5.1 If a facility chooses to use alternative CE protocols and test methods that satisfy either the DQO or LCL and the additional criteria in section 4., the following information should be submitted with each test report to the appropriate regulatory agency:

1. A copy of all alternative test methods, including any changes to the EPA reference methods, QA/QC procedures and calibration procedures.

2. A table with information on each liquid sample, including the sample identification, where and when the sample was taken, and the VOC content of the sample;

3. The coating usage for each test run (for protocols in which the liquid VOC input is to be determined);

4. The quantity of captured VOC measured for each test run;

5. The CE calculations and results for each test run;

6. The DQO or LCL calculations and results; and

7. The QA/QC results, including information on calibrations (e.g., how often the instruments were calibrated, the calibration results, and information on calibration gases, if applicable).

6. Recommended Recordkeeping for Alternative CE Protocols.

6.1 A record should be kept at the facility of all raw data recorded during the test in a suitable form for submittal to the appropriate regulatory authority upon request.

[61 FR 27140, May 30, 1996, as amended at 71 FR 29804, May 24, 2006]

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Description and Location

Source Name:	Bemis Company, Inc.
Source Location:	1350 North Fruitridge Ave., Terre Haute, IN 47804
County:	Vigo
SIC Code:	2673 & 3081
Operation Permit No.:	T 167-27050-00033
Operation Permit Issuance Date:	October 28, 2009
Significant Source Modification No.:	167-34018-00033
Permit Reviewer:	Deena Patton

Existing Approvals

The source was issued Part 70 Operating Permit No. T167-27050-00033 on October 28, 2009. The source has since received the following approvals:

Permit Type	Permit Number	Issuance Date
Interim Significant Source Modification	167-31288i-00033	March 1, 2012
Significant Source Modification	167-31288-00033	April 11, 2012
Significant Permit Modification	167-31309-00033	May 1, 2012
Interim Significant Source Modification	167-33854i-00033	February 19, 2014
Significant Source Modification	167-33854-00033	April 2, 2014
Significant Permit Modification	167-33874-00033	April, 22, 2014

County Attainment Status

The source is located in Vigo County.

Pollutant	Designation
SO_2	Non-attainment effective October 4, 2013, for the Fayette and Harrison Twp. The remainder of Vigo County is unclassifiable or attainment.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards

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 ozone. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Vigo County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) SO_2
U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, has designated Vigo County Harrison Township as nonattainment for SO_2. Therefore, SO_2 emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(d) Other Criteria Pollutants
Vigo County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

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

Pollutant	**Emissions** (ton/yr)
PM	<100
PM_{10}	<100
$PM_{2.5}$	<100
SO_2	0
VOC	>250
CO	0
NO_X	0
GHGs as CO_2e	<100,000
Total HAPs	<25
Single HAP	<10

(a) The source wide GHG emissions are less than one hundred thousand (<100,000) tons of CO_2 equivalent (CO_2e) emissions per year. GHG emissions do not affect the source PSD status.

(b) These emissions are based upon the technical support document (TSD) for Significant Source Modification No.: 167-33854-00033.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than

twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Bemis Company, Inc. on December 23, 2013, relating to the modification of photopolymer plate making system identified as Cyrel. The following is a list of the modified emission units and pollution control devices:

(jj) **Photopolymer** ~~Cyrel~~ plate making facility, **identified as Cyrel,** constructed in 1992, **and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and** exhausting to stack**s** ~~23~~**5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14**.

Enforcement Issues

IDEM is aware that there is a pending enforcement action for modification of the photopolymer plate making facility, identified as Cyrel. IDEM is still reviewing this matter and will take the appropriate action.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

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

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

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

PTE Change of the Modified Process			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
PM	0.00	0.00	0.00
PM_{10}	0.00	0.00	0.00
$PM_{2.5}$	0.00	0.00	0.00
SO_2	0.00	0.00	0.00
VOC	16.41	151.84	135.43
CO	0.00	0.00	0.00
NO_X	0.00	0.00	0.00
HAPs	0.00	0.00	0.00

This source modification is subject to 326 IAC 2-7-10.5(g)(4)(D), because VOC emissions are greater than twenty-five (25) tons per year. Additionally, the modification will be incorporated into

the Part 70 Operating Permit through a Part 70 Operating Permit Renewal issued pursuant to 326 IAC 2-7-3(a)(1)(D).

Permit Level Determination – PSD and Emission Offset

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

	Potential to Emit (ton/yr)							
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**GHGs**
Cyrel	0.00	0.00	0.00	0.00	7.71	0.00	0.00	0.00
Total for Modification	0.00	0.00	0.00	0.00	7.71	0.00	0.00	0.00
Significant Level for PSD	25	15	10	NA	40	100	40	75,000 CO_2e
Significant Level for Emission Offset	NA	NA	NA	40	NA	NA	NA	NA

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

This modification to an existing major PSD stationary source is not major because:
(a) The emissions increase of each PSD regulated pollutant, excluding GHGs, are less than the PSD significant thresholds; and

Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing minor stationary source is not major because the SO2 emissions increase is less than the Emission Offset significant level. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS [40 CFR 60]:
(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this proposed modification.

NESHAP [40 CFR 61, and 40 CFR63]:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this proposed modification because no HAPs are emitted from this emission unit.

CAM:

(c) 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 Part 70 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.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Cyrel (VOC)	None	Y	54.75	2.74	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to this modified unit as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-1.1-5 (Nonattainment New Source Review)
Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-2 and 2-3 (PSD and Emission Offset)
PSD and Emission Offset applicability are discussed under the Permit Level Determination – PSD and Emission Offset section.

(c) The following conditions renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

(i) The total VOC emissions from press #42 including cleanup activities shall be limited to less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

$$\text{VOC emissions per month} = \left[\left(\text{Actual VOC usage in tons} * \left(1 - \frac{\text{overall control efficiency}}{100}\right)\right) + \text{Cleanup VOC loss} + \text{Uncontrolled VOC}\right]$$

Compliance with this limit, combined with the potential to emit VOC from associated dryers at this press, shall limit the source-wide total potential to emit of VOCs to less than 40 tons per year, and shall render 326 IAC 2-2 (Prevention

of Significant Deterioration) not applicable to the flexographic printing press and associated dryers.

……

(d) Pursuant to SSM 167-34018-00033, and 326 IAC 2-2 (PSD), the conditions apply:

The total VOC emissions from Photopolymer plate making facility, identified as Cyrel, including cleanup activities shall be limited to less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

VOC emissions per month = [(Actual VOC usage in tons * (1 - overall control efficiency) + Cleanup VOC loss + Uncontrolled VOC] / 100

Compliance with this limit shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the Photopolymer plate making facility, identified as Cyrel.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of Cyrel will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 8-1-6 (Volatile Organic Compound Rules: New Facilities; General Reduction Requirements)
Because the Photopolymer platemaking facility, identified as Cyrel, is over twenty-five (25) tons per year, the Permittee shall comply with the following VOC BACT limits:

(a) Whenever the Photopolymer plate making process, identified as Cyrel, is applying VOC-containing materials, exhaust from that press shall be vented through the operating Plant 2 oxidation control system consisting of oxidizers I5, I6, I7, I8, I9, I10, I11, I12, I13, and I14. Cyrel shall have a minimum capture efficiency of 100% excluding fugitive emissions from Drum emptying. The oxidation control system shall have a minimum destruction efficiency of 95%.

(b) The Cyrel Plate making system shall not process more than 140,160,000 square inches of photopolymer material per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The VOC input shall not exceed 2.16 lbs per thousand square inch of photopolymer material per twelve (12) consecutive month period.

Compliance Determination and Monitoring Requirements

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

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination

Testing Requirements:

(a) Not later than 180 days after the startup of Cyrel, in order to demonstrate compliance with Conditions D.1.1, D.1.2, D.1.3, and D.1.4, the Permittee shall perform test to verify the VOC destruction efficiency on catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, I12, I13, I14, and I15, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Testing requirements for the capture efficiency of the flexographic presses identified as #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #37, #38, #39, #40, #41, #42 and Cyrel shall be performed no later than 180 days whenever reconfiguration or change in the design of a press is made as follows:

(1) The capture efficiency test shall be repeated for a press in this section whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:

(A) The addition of print station to a press;

(B) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers); or

(C) Changing the static duct pressure.

Permanent Total Enclosure

The capture system for presses #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #37, #38, #39 and #40 shall be considered to achieve one-hundred percent (100%) capture efficiency if the system meets the following criteria for a Permanent or Temporary Total Enclosure under EPA Method 204:

(a) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.

(b) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.

(c) The total area of all NDOs shall not exceed 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 NDOs shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDOs shall be into the enclosure.

(e) All access doors and windows whose areas are not included in (3) and are not included in the calculation in (4) 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.

Changes

The changes listed below have been made to Part 70 Operating Permit No. 167-27050-00033. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Proposed Changes

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:

***

(jj) **Photopolymer** ~~Cyrel~~ plate making facility, **identified as Cyrel,** constructed in 1992, **and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and** exhausting to stack**s** ~~23~~**5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14**.

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36 #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29,

#30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 14.

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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. Support information includes the following:~~

~~(AA) All calibration and maintenance records.~~
~~(BB) All original strip chart recordings for continuous monitoring instrumentation.~~
~~(CC) Copies of all reports required by the Part 70 Operating Permit.~~

~~Records of required monitoring information include the following:~~

~~(AA) The date, place, as defined in this permit, and time of sampling or measurements.~~
~~(BB) The dates analyses were performed.~~
~~(CC) The company or entity that performed the analyses.~~
~~(DD) The analytical techniques or methods used.~~
~~(EE) The results of such analyses.~~
~~(FF) The operating conditions as existing at the time of sampling or measurement.~~

~~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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

~~(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.~~

(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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) 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

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] **[326 IAC 2-3] [40 CFR 64][326 IAC 3-8]**

~~(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 except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.~~

~~(b) The address for report submittal is:~~

~~Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251~~

~~(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 on or before the date it is due.~~

~~(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.~~

***

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) 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 (ww) and/or 326 IAC 2-3-1 (pp), 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).

(f) The report for project at an existing emissions unit shall be submitted no later than 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 (d)(1) and (2) 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 wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(g) 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.

***

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS: Presses and Oxidizers

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

***

(jj) Photopolymer plate making facility, identified as Cyrel, constructed in 1992, and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System

for VOC control, and exhausting to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14.

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41,~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, #42, **and the Cyrel**, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental

fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41, ~~and/or~~ #42, **and the Cyrel**, and exhausting to stack 14.

***

(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.1.2 PSD Minor Limit [326 IAC 2-2]

(a) Pursuant to SSM 167-18122-00033, issued on May 3, 2004, and revised through T167-6182-00033, issued on June 28, 2004, the following conditions apply:

(i) ***

(ii) Whenever press #36 is applying VOC-containing materials, the press exhaust shall be vented through the operating oxidation control system. ~~The oxidation control system controlling press #36 shall maintain a minimum overall control efficiency of 80.75% for VOC emissions.~~

(b) The following conditions renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

(i) ***

~~(ii) Whenever press #41 is applying VOC-containing materials, the press exhaust shall be vented through the operating oxidation control system. The oxidation control system controlling press #41 shall maintain a minimum overall control efficiency of 95% for VOC emissions.~~

(c) The following conditions renders 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

(i) ***

~~(ii) Whenever press #42 is applying VOC-containing materials, the press exhaust shall be vented through the operating oxidation control system. The oxidation control system controlling press #42 shall maintain a minimum overall control efficiency of 95% for VOC emissions.~~

(d) Pursuant to SSM 167-34018-00033, and 326 IAC 2-2 (PSD), the conditions apply:
The total VOC emissions from Photopolymer plate making facility, identified as Cyrel, including cleanup activities shall be limited to less than 39.9 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month based on the previous 12 months using the following equation:

VOC emissions per month = [(Actual VOC usage in tons * (1 - overall control efficiency) + Cleanup VOC loss + Uncontrolled VOC] / 100

Compliance with this limit shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the Photopolymer plate making facility, identified as Cyrel.

D.1.3 VOC Best Available Control Technology (BACT) and PSD Minor Limit [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Permittee shall comply with the following limits for VOC BACT:

(a) Whenever the Photopolymer plate making process, identified as Cyrel, is applying VOC-containing materials, exhaust from that press shall be vented through the operating Plant 2 oxidation control system consisting of oxidizers I5, I6, I7, I8, I9, I10, I11, I12, I13, and I14. Cyrel shall have a minimum capture efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%. The capture efficiency shall be considered to achieve one-hundred percent (100%)capture efficiency if the system meets the following criteria under EPA Method 204.

(b) The Cyrel Plate making system shall not process more than 140,160,000 square inches of photopolymer material per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The VOC input shall not exceed 2.16 lbs per thousand square inch of photopolymer material per twelve (12) consecutive month period.

D.1.~~3~~**4** Volatile Organic Compounds (VOC) [326 IAC 8-5-5]

***

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the facilities and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of Cyrel, in order to demonstrate compliance with Conditions D.1.1, D.1.2, D.1.3, and D.1.4, the Permittee shall perform test to verify the VOC destruction efficiency on catalytic oxidizers (I5, I6, I7, I8, I9, I10, I11, I12, I13, I14, and I15, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Testing of press #42, to verify its capture efficiency, shall be performed not later than 180 days after start-up of press #42.

(c) Testing requirements for the capture efficiency of the flexographic presses identified as #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #34, #37, #38, #39, #40, #41, #42 **and Cyrel** shall be performed no later than 180 days whenever reconfiguration or change in the design of a press is made as follows:

(1) The capture efficiency test shall be repeated for a press in this section whenever a reconfiguration or change in the design of that press is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of these presses, which include any of the following:

(A) The addition of print station to a press;

(B) Increasing or decreasing the volumetric flow rate from the dryer (e.g, by changing the size of press fans/motors or removal or derating of dryers); or

(C) Changing the static duct pressure.

(d) Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.7 Permanent Total Enclosure

The capture system for presses #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #37, #38, #39, #40 and Cyrel system 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:

(a) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.

(b) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.

(c) The total area of all NDOs shall not exceed 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 NDOs shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all NDOs shall be into the enclosure.

(e) All access doors and windows whose areas are not included in (3) and are not included in the calculation in (4) 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.

D.1.~~7~~**8** Oxidizer Grouping

(a) ***

(b) To prevent an uncontrolled release of captured VOC emissions:

***

(3) In the event of an oxidizer malfunction that could result in the uncontrolled release of captured VOC emissions, the oxidizer shall be immediately removed from the oxidization control system and the press **and cyrel** 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.

(4) In the event of a T-damper malfunction that could result in the uncontrolled release of captured VOC emissions, the connected press **and Cyrel** shall be immediately shut down.

***

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

D.1.~~8~~**9** Oxidizer Temperature [326 IAC 2-2]

***

D.1.~~9~~**10** Parametric Monitoring [326 IAC 2-2] [40 CFR 64]

(a) The Permittee shall establish the appropriate monitoring parameter for each press **and Cyrel** (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.1.1, D.1.2, and D.1.4.

(b) ***

(c) The Permittee shall maintain one of the following monitoring parameter values for each press **and Cyrel** enclosed in a PTE for each day the press is operating as an indication that 100 percent capture is being attained:

***

D.1.~~10~~**11** 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, #18, #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #36, #37, #38, #39, #40, #41 and #42 **and Cyrel:**

***

D.1.~~11~~ **12** Monitoring [40CFR 64]

***

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

D.1.~~10~~**13** Record Keeping Requirements

***

(c) To document the compliance status with Conditions D.1.2 (d) and D.1.3, the Permittee shall maintain the records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits; and square inches of Cyrel plate making facility established in Conditions D.1.2(d) and D.1.3.

(1) The total amount of square inches processed each month for Cyrel Plate making facility.

(2) The total VOC emissions for each month.

***

D.1.1~~2~~4 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.1.2 **and D.1.3(b)** 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, not later than thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by a "responsible official" as defined by 326 IAC 2-7-1(35).

***

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

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

***

(kk) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 5.

(ll) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 6.

(mm) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 7.

(nn) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 8.

(oo) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 9.

(pp) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 10.

(qq) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29 #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 11.

(rr) 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 emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29,

#30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 12.

(ss) Regenerative thermal oxidizer, identified as I13, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel**, and exhausting to stack 13.

(tt) Regenerative thermal oxidizer, identified as I14, with a maximum air flow rate of 55000 CFM, and a maximum heat input rating of 10.0 million BTU per hour for the supplemental fuel, capable of controlling emissions from presses #19, #20, #21, #22, #23, #24, #25, #27, #28, #29, #30, #31, #32, #33, #36, #37, #38, #39, #40, #41 ~~and/or~~ #42 **and the Cyrel** and exhausting to stack 14.

***

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

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: **Bemis Company, Inc.**
Source Address: **1350 N. Fruitridge Ave., Terre Haute, IN 47804**
Part 70 Permit No.: **T167-27050-00033**
Facility: **Cyrel Plate**
Parameter: **square inches of plate coated**
Limit: **Cyrel Plate making system shall not process more than 140,160,000.00 square inches per twelve (12) consecutive month period, with compliance determined at the end of each month.**

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____

***

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

Part 70 Quarterly Report

Source Name: **Bemis Company, Inc.**
Source Address: **1350 North Fruitridge Avenue, Terre Haute, Indiana 47804**
Part 70 Permit No.: **T167-27050-00033**
Facility: **Cyrel**
Parameter: **VOC emissions**
Limit: Less than 39.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: **YEAR:**

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 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: _____
***

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 167-34018-00033. The operation of this plate shall not start until after the issuance of the Renewal Permit. The staff recommends to the Commissioner that this Part 70 Significant Source Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Deena Patton at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5400 or toll free at 1-800-451-6027 extension 4-5400.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations

Company Name: Bemis Company, Inc.
Address City, IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit No.: 167-34018-00033
Reviewer: Deena Patton

Uncontrolled Potential to Emit (ton per year)											
Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**GHGs**	**HAPs**	**Worst Single HAP**	
Cyrel Platemaking facility	0.00	0.00	0.00	0.00	0.00	151.84	0.00	0.00	0.00	0.00	N/A
Catalytic Oxidizers	0.16	0.65	0.65	0.05	8.59	0.47	7.21	10367.13	0.16	0.15	Hexane
Thermal Oxidizers	0.22	0.89	0.89	0.07	11.72	0.64	9.85	14151.13	0.22	0.21	Hexane
Fire Pump	0.08	0.08	0.08	0.07	1.06	0.09	0.23	39.52	9.29E-04	2.83E-04	Formaldehyde
Emergency GEN1 and GEN2	0.00	0.00	0.00	0.00	0.97	0.03	0.08	33.79	0.02	0.01	Formaldehyde
Parts Washer	0.00	0.00	0.00	0.00	0.00	19.34	0.00	0.00	0.00	0.00	N/A
Flex. Printing Presses	0.00	0.00	0.00	0.00	0.00	18978.60	0.00	0.00	0.00	0.00	N/A
Process Heaters	0.29	1.16	1.16	0.09	15.29	0.84	12.84	18459.22	0.29	0.28	Hexane
Total	**0.75**	**2.78**	**2.78**	**0.28**	**37.63**	**19152**	**30.21**	**43051**	**0.69**	**0.64**	**Hexane**

Controlled Potential to Emit (ton per year)											
Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**GHGs**	**HAPs**	**Worst Single HAP**	
Cyrel Platemaking facility	0.00	0.00	0.00	0.00	0.00	7.59	0.00	0.00	0.00	0.00	N/A
Catalytic Oxidizers	0.16	0.65	0.65	0.05	8.59	0.47	7.21	10367.13	0.16	0.15	Hexane
Thermal Oxidizers	0.22	0.89	0.89	0.07	11.72	0.64	9.85	14151.13	0.22	0.21	Hexane
Fire Pump	0.08	0.08	0.08	0.07	1.06	0.09	0.23	39.52	9.29E-04	2.83E-04	Formaldehyde
Emergency GEN1 and GEN2	0.00	0.00	0.00	0.00	0.97	0.03	0.08	33.79	0.02	0.01	Formaldehyde
Parts Washer	0.00	0.00	0.00	0.00	0.00	19.34	0.00	0.00	0.00	0.00	N/A
Flex. Printing Presses	0.00	0.00	0.00	0.00	0.00	997.38	0.00	0.00	0.00	0.00	N/A
Process Heaters	0.29	1.16	1.16	0.09	15.29	0.84	12.84	18459.22	0.29	0.28	Hexane
Total	**0.75**	**2.78**	**2.78**	**0.28**	**37.63**	**1026**	**30.21**	**43051**	**0.69**	**0.64**	**Hexane**

Limited Potential to Emit (ton per year)											
Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**GHGs**	**HAPs**	**Worst Single HAP**	
Cyrel Platemaking facility	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00	0.00	0.00	N/A
Catalytic Oxidizers	0.16	0.65	0.65	0.05	8.59	0.47	7.21	10367.13	0.16	0.15	Hexane
Thermal Oxidizers	0.22	0.89	0.89	0.07	11.72	0.64	9.85	14151.13	0.22	0.21	Hexane
Fire Pump	0.08	0.08	0.08	0.07	1.06	0.09	0.23	39.52	9.29E-04	2.83E-04	Formaldehyde
Emergency GEN1 and GEN2	0.00	0.00	0.00	0.00	0.97	0.03	0.08	33.79	0.02	0.01	Formaldehyde
Parts Washer	0.00	0.00	0.00	0.00	0.00	19.34	0.00	0.00	0.00	0.00	N/A
Flex. Printing Presses	0.00	0.00	0.00	0.00	0.00	997.38	0.00	0.00	0.00	0.00	N/A
Process Heaters	0.29	1.16	1.16	0.09	15.29	0.84	12.84	18459.22	0.29	0.28	Hexane
Total	**0.75**	**2.78**	**2.78**	**0.28**	**37.63**	**1027**	**30.21**	**43051**	**0.69**	**0.64**	**Hexane**

Appendix A: Emissions Calculations

Company Name: Bemis Company, Inc.
Address City, IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit No.: 167-34018-00033
Reviewer: Deena Patton

The Cyrel Plate Making Facility has a bottleneck located in the plate processor. Because of this bottleneck the potential emissions are based off the plate processor.

Potential Emissions

Max. Throughput (plates/hour)	Max. Width (ft)	Max. Length (ft)	Total Area Processed (ft^2/hr)	Total Area Processed (ft^2/yr)	Emission Factor (lb VOC/sq. foot)*	Uncontrolled Potential Emissions (lb/year VOC)	Uncontrolled Potential Emissions (ton/yr VOC)	RTO Control Efficiency (%)	Controlled Potential Emissions (ton/yr VOC)
4	4.17	6.67	111.11	973333.33	0.312	303680	**151.84**	95%	**7.59**

*Emission factor is the worst case lb VOC/sq foot + the 20% margin.

Maximum Projected Actual Emissions

Total Area Processed (ft^2/month)*	Total Area Processed (ft2/hr)	Emission Factor (lb VOC/ sq. foot)	Uncontrolled Potential Emissions (lb/month VOC)	Uncontrolled Potential Emissions (lb/yr VOC)	Uncontrolled Potential Emissions (ton/yr VOC)	RTO Control Efficiency (%)	Controlled Potential Emissions (ton/yr VOC)
38889	53.27	0.1125	4375.01	52500.15	26.25	95%	1.31

*Based off highest known monthly production August 2012.

Methodolgy:
Total Area Processed (ft^2/hr) = Max. Throughput (plates/hour) * Max. Width (ft) * Max. Length (ft)
Total Area Processed (ft^2/yr) = Total Area Processed (ft^2/hr) * 8760 hours/1 year
Uncontrolled Potential Emissions (lb/yr VOC) = Total Area Processed (ft^2/yr) * Emission Factor (lb VOC/ sq. foot)
Uncontrolled Potential Emissions (ton/yr VOC) = Uncontrolled Potential Emissions (lb/yr VOC) * 1ton/2000lbs
Controlled Potential Emissions (ton/yr VOC) = Uncontrolled Potential Emissions (ton/yr VOC) * (1- Control Efficiency (%))

Limited Emissions

Total Area Processed (in^2/hr)	Total Area Processed (in^2/yr)	Total Area Processed (ft^2/hr)	Total Area Processed (ft^2/yr)	Emission Factor (lb VOC/sq. foot)	Uncontrolled Potential Emissions (lb/year VOC)	Uncontrolled Potential Emissions (ton/yr VOC)	RTO Control Efficiency (%)	Controlled Potential Emissions (ton/yr VOC)
16000.00	**140160000.00**	111.11	973333.33	0.3168	308351.9998	**154.18**	95%	**7.71**

Methodology:
Total Area Processed (in^2/hr) = Total Area Processed (in^2/yr) / 8760 hours
Total Area Processed (ft^2/hr) = Total Area Processed (ft^2/yr) / 8760 hours
Total Area Processed (ft^2/yr) = Total Area Processed (in^2/yr) * 0.00694444 ft2
Uncontrolled Potential Emissions (lb/yr VOC) = Total Area Processed (ft^2/yr) * Emission Factor (lb VOC/ sq. foot)
Uncontrolled Potential Emissions (ton/yr VOC) = Uncontrolled Potential Emissons (lb/yr VOC) / 2000 lbs
Controlled Potential Emissions (ton/yr VOC) = Uncontrolled Potential Emissions (ton/yr VOC) * (1-RTO Control Efficiency (%))

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

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Emission Unit/ID	MMBtu/hr
I5	2.5
I6	2.5
I7	2.5
I8	2.5
I9	4.5
I10	4.5
I11	3.5
Total	**20**

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
20.0	1020	171.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.2	0.7	0.7	0.1	8.6	0.5	7.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.804E-04	1.031E-04	6.441E-03	1.546E-01	2.920E-04	**1.616E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	4.294E-05	9.447E-05	1.202E-04	3.264E-05	1.804E-04	**4.706E-04**
					Total HAPs	**1.621E-01**
					Worst HAP	**1.546E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	10,306	0.2	0.2
Summed Potential Emissions in tons/yr	10,306		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	10,367		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	10,369		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

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

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Emission Unit/ID	MMBtu/hr
I13	10
I14	10
I15	7.3
Total	**27.3**

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
27.3	1020	234.5

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.2	0.9	0.9	0.1	11.7	0.6	9.8

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.462E-04	1.407E-04	8.792E-03	2.110E-01	3.986E-04	**2.206E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	5.861E-05	1.290E-04	1.641E-04	4.455E-05	2.462E-04	**6.424E-04**
					Total HAPs	**2.212E-01**
					Worst HAP	**2.110E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	14,068	0.3	0.3
Summed Potential Emissions in tons/yr	14,068		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	14,151		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	14,153		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).
CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
VOC and Particulate
From Cold Cleaner

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Material	Density (Lb/gal)	VOC Emission Rate (gal/hr)*	VOC emissions (lb/hr)	VOC emissions (ton/yr)
Reclaim Mix	6.9	0.64	4.416	19.34208

*Based upon manufacturer data

Methodolgy
VOC emissions (lb/hr) = Density (Lb/gal) * VOC Emission Rate (gal/hr)
VOC emissions (ton/yr) = VOC emissions (lb/hr) * 8760 hours / 2000lbs

Appendix A: Emissions Calculations
Flexographic Printing Presses

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

* The calculations below were submitted via the source and have been determined accurate by IDEM.
Due to confidential information only the total VOC information will be displayed.

Press ID	Uncontrolled Maximum Potential to Emit VOC (ton/yr)	Controlled Maximum Potential to Emit VOC (ton/yr)	Actual (ton/yr)
Press 2	372.3	372.3	74.7
Press 19 through Press 25	503.7	25.2	4.4
Press 27 through Press 30	613.2	30.7	4.7
Press 31	613.2	30.7	4.3
Press 32	613.2	30.7	4.6
Press 33	613.2	30.7	5.3
Press 36	503.7	39.99	3.1
Press 37	1401.6	70.1	14.5
Press 38	1401.6	70.1	13.5
Press 39	2168.2	108.5	19.9
Press 40	2168.2	108.5	17.6
Press 41	2833.9	39.99	14.7
Press 42	5172.6	39.9	17.3
Total	**18978.6**	**997.38**	**198.6**

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

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Emission Unit/ID	Number of Units	MMBtu/hr each	MMBtu/hr, combined
P2	1	1.2	1.2
P19 through P25	7	1.67	11.69
P27 through P30	4	2.01	8.04
P31 through P33	3	1.53	4.59
P37 and P38	2	1.142	2.284
P39 and P40	2	2.389	4.778
P41 BC	1	0.237	0.237
P41 Tunnel	1	0.398	0.398
P42 BC	1	1.024	1.024
P42 Tunnel	1	1.365	1.365
Total	23	12.965	**35.606**

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
35.6	1020	305.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.3	1.2	1.2	0.1	15.3	0.8	12.8

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	3.211E-04	1.835E-04	1.147E-02	2.752E-01	5.198E-04	**2.877E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	7.645E-05	1.682E-04	2.141E-04	5.810E-05	3.211E-04	**8.379E-04**
					Total HAPs	**2.885E-01**
					Worst HAP	**2.752E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	18,348	0.4	0.3
Summed Potential Emissions in tons/yr	18,348		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	18,457		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	18,459		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

Company Name: Bemis Company, Inc.
Address City IN Zip: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Output Horsepower Rating (hp)	137.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	68,500

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.08	0.08	0.08	0.07	1.06	0.09	0.23

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	2.24E-04	9.81E-05	6.83E-05	9.37E-06	2.83E-04	1.84E-04	2.22E-05	4.03E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**9.29E-04**

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	3.94E+01	1.59E-03	3.17E-04

Summed Potential Emissions in tons/yr	**3.94E+01**
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	**3.95E+01**
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	**3.95E+01**

Methodology
Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]
CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

CO2e (tons/yr) based on 10/30/2009 federal GWPs = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
4-Stroke Lean-Burn (4SLB) Engines

Company Name: Bemis Company, Inc.
Source Address: 1350 North Fruitridge Avenue, Terre Haute, IN 47804
Permit Number: 167-34018-00033
Reviewer: Deena Patton

Maximum Output Horsepower Rating (hp)	127
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7500
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	476
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	0.47

	Pollutant						
Criteria Pollutants	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Potential Emissions (tons/yr)	0.0000	0.00	0.00	0.000	0.97	0.03	0.08

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.
PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	8.36E-03	0.002
Acrolein	5.14E-03	0.001
Benzene	4.40E-04	0.000
Biphenyl	2.12E-04	0.000
1,3-Butadiene	2.67E-04	0.000
Formaldehyde	5.28E-02	0.013
Methanol	2.50E-03	0.001
Hexane	1.10E-03	0.000
Toluene	4.08E-04	0.000
2,2,4-Trimethylpentane	2.50E-04	0.000
Xylene	1.84E-04	0.000
	Total	**0.02**

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

Methodology
Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
Potential Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] * [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

	Greenhouse Gas (GHG)		
Greenhouse Gases (GHGs)	CO2	CH4	N2O
Emission Factor in lb/MMBtu*	110	1.25	
Emission Factor in lb/MMcf**			2.2
Potential Emission in tons/yr	26.19	0.30	0.00
Summed Potential Emissions in tons/yr	26.49		
CO2e Total in tons/yr based on 11/29/2013 federal GWPs	33.79		
CO2e Total in tons/yr based on 10/30/2009 federal GWPs	33		

Methodology
*The CO2 and CH4 emission factors are from Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
**The N2O emission factor is from AP 42, Table 1.4-2. The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
For CO2 and CH4: Emission (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton]
For N2O: Emission (tons/yr) = [Potential Fuel Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] / [2,000 lb/ton]
CO2e (tons/yr) based on 11/29/2013 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).
CO2e (tons/yr) based on 10/30/2009 federal GWPs= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
CO2 = Cabon Dioxide
CH4 = Methane
N2O = Nitrous Oxide
CO2e = CO2 equivalent emissions

Appendix A – BACT Analysis

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD)
Best Available Control Technology

Source Background and Description

Source Name:	**Bemis Company, Inc**.
Source Location:	**1350 North Fruitridge Ave., Terre Haute, IN 47804**
County:	**Vigo**
SIC Code:	**2673 & 3081**
Operation Permit No.:	**T167-27050-00033**
Operation Permit Issuance Date:	**October 28, 2009**
Significant Source Modification No.:	**167-34018-00033**
Permit Reviewer:	**Deena Patton**

Proposed Expansion

Bemis Company, Inc. (Bemis) owns and operates a flexible packaging manufacturing plant in Terre Haute, Indiana. On December 23, 2013 Bemis submitted an application for the modification and continued operation of its Cyrel platemaking process. It has been determined that a BACT analysis is required under the provisions of 326 IAC 8-1-6 (Best Available Control Technology (BACT)) because the potential to emit is above 25 tons of VOC per year.

The Cyrel platemaking process is located in a permanent total enclosure with vents that exhaust directly to the regenerative thermal oxidizer and catalytic oxidizer system. Cyrel is an automatic process that uses fresh and reclaimed solvent. As the solvent runs through the Cyrel platemaking process, the solvent deposits into a still at the bottom. The still is then dumped into a 50 gallon barrel about every two (2) days and sent off for reclamation. It is important to note that the solvent that is placed into the still has the consistency of tar. Fresh solvent and reclaimed solvent are then added into the Cyrel platemaking process to a certain level to ensure that the process operates consistently.

Bemis Company, Inc., located at 1350 North Fruitridge Ave., Indiana, in Vigo County submitted a Significant Source Modification application to IDEM, OAQ on December 23, 2013.

Requirement for Best Available Control Technology (BACT)

326 IAC 8-1-6 requires a best available control technology (BACT) review to be performed on the proposed modification because the modification has the potential to emit of VOC emissions greater than 25 tons per year, which exceeds the level for this pollutant.

Emission Units Subject to BACT Requirements for VOC:

The following emission units have the potential to emit Volatile Organic Compounds (VOC); therefore, a Best Available Control Technology analysis for VOC was performed for this unit:

Photopolymer plate making facility, identified as Cyrel, constructed in 1992, and modified in 2014, with a capacity of 111.11 ft^2/hr, using Plant 2 Oxidation System for VOC control, and exhausting

to stacks 5, 6, 7, 8, 9, 10, 11, 12, 13, and/or 14.

Requirement for VOC BACT

The Cyrel platemaking facility has the total potential to emit of volatile organic compounds (VOC) greater than 25 tons per year; therefore, a Best Available Control Technology analysis for VOCs was performed for the Cyrel platemaking facility.

Summary of the Best Available Control Technology (BACT) Process

BACT is an emissions limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute significantly to air pollution, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a "top down" process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or permit, or controls achieved in practice. The highest level of control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially "available" control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Innovative controls are normally given a waiver from the BACT requirements due to the uncertainty of actual control efficiency. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

Step 5: Select BACT

The Office of Air Quality (OAQ) makes final BACT determinations by following the five steps identified above.

Volatile Organic Compounds (VOC) BACT – Cyrel platemaking facility

Step 1: Identify Potential Control Technologies

The volatile organic compounds (VOC) emissions can be controlled by the following emission control systems:

(1) Destruction Processes;

(2) Reclamation Processes; and/or

(3) Combination of Reclamation and Destruction Technologies.

Destruction technologies reduce VOC concentration by high temperature oxidation into carbon dioxide and water vapor. Reclamation is the capture of VOCs for reuse or disposal. A further description of these types of control technologies follows.

Destruction Control Methods
The destruction of organic compounds usually requires temperatures ranging from 1,200^{0}F to 2,000^{0}F for direct thermal incinerators or 600^{0}F to 1,200^{0}F for catalytic systems. Combustion temperature depends on the chemical composition and the desired destruction efficiency. Carbon dioxide and water vapor are the typical products of complete combustion. Turbulent mixing and

combustion chamber retention times of 0.5 to 1.0 seconds are needed to obtain high destruction efficiencies.

Control technologies include direct incineration, recuperative thermal incineration, regenerative thermal incineration, recuperative catalytic incineration, regenerative catalytic incineration, and flares.

Direct Incineration: Direct incineration is the most simple and direct form of incineration. It involves burning the VOC-laden fumes directly in a combustion chamber without pre-heating or post-combustion heat recover. Direct incineration typically requires supplemental fuel. Concentrated VOC streams with high heat contents obviously require less supplementary fuel than more dilute streams. VOC streams sometimes have a heat content high enough to be self-sustaining, but a supplemental fuel firing rate equal to about 5% of the total incinerator heat input is usually needed to stabilize the burner flame. Natural gas is the most common fuel for VOC incinerators, but fuel oil is an option in some circumstances.

Recuperative Thermal Oxidation: Recuperative thermal incinerators are add-on control devices used to control VOC emissions by introducing solvent-laden fumes to the oxidizer. The stream is pre-heated by exiting flue gas from the same system in a heat exchanger or recuperator. A burner then heats the air to the required temperature. The air is then passed through an oxidation chamber where the solvent-laden air is converted to carbon dioxide and water. These are then passed through the heat exchanger where incoming fume is preheated by the heat of the exiting flue gas. Finally the clean flue gas is discharged to the atmosphere. The recuperative thermal oxidizer is appropriate for waste streams with a relatively high solvent content and/or consistent pollutant loading. Variation in pollutant loading will require a longer retention time in the oxidizer in order to properly destroy VOC emissions.

Regenerative Thermal Oxidation: Regenerative thermal oxidizers (RTOs) are add-on control devices used to control VOC emissions by simple reaction of the harmful air pollutants with oxygen and heat. An RTO uses a direct contact heat exchanger. These direct contact heat exchangers consist of a bed of porous ceramic packing or other structured, high heat capacity media. These systems can handle variable and low-concentration VOC waste streams.

The inlet gas first passes through a hot ceramic bed thereby heating the stream (and cooling the bed) to its ignition temperature. The hot gases then react (releasing energy) in the combustion chamber and while passing through another ceramic bed, thereby heating it to the combustion chamber outlet temperature. The process flows are then switched, now feeding the inlet stream to the hot bed. This cyclic process affords very high energy recovery (up to 95%). The higher capital costs associated with these high-performance heat exchangers and combustion chambers may be offset by the increased auxiliary fuel savings to make such a system economical.

Recuperative and Regenerative Catalytic Oxidation: Catalytic incinerators are add-on control devices used to control VOC emissions by using a bed of catalyst that facilitates the oxidation of the combustible gases. The catalyst increases the reaction rate and allows the conversion of VOC at lower temperatures than thermal incinerators. Catalytic oxidation can be used for low-concentration VOC waste streams; however, certain compounds present in waste stream gas may foul the catalyst. It may also be necessary to remove particulate prior to catalytic oxidation as well.

Flares: Flaring is used to control VOC emissions by piping VOCs to a remote, usually elevated location and burning them in an open flame in the open air using a specially

designed burner tip, auxiliary fuel, and steam or air to promote mixing for nearly complete (> 98%) VOC destruction. While flares are designed to eliminate waste gas streams, they can cause safety and operational problems and the exhaust stream concentration must be high enough to sustain combustion.

Reclamation Control Methods

Organic compounds may be reclaimed by one of three possible methods; adsorption, absorption (scrubbing) or condensation. In general, the organic compounds are separated from the emission stream and reclaimed for reuse or disposal. Depending on the nature of the contaminant and the inlet concentration of the emission stream, recovery technologies can reach efficiencies of 98%.

Adsorption: Adsorption is a surface phenomenon where attraction between the carbon and VOC molecules binds the pollutants to the carbon surface. Both carbon and VOC are chemically intact after adsorption. The VOCs may be removed, or desorbed, from the carbon bed reclaimed and destroyed. Adsorption can be used for relatively low VOC exhaust streams. Pollutants present in the gas streams can reduce adsorber efficiency, increase pressure drop and eventually plug the bed. Adsorption processes can be used to capture VOCs in low concentration exhaust; however, it is typically only used for exhaust that is not loaded with other pollutants which can plug the bed.

Absorption: Absorption is a unit operation where components of a gas phase mixture (Pollutants) are selectively transferred to a relatively nonvolatile liquid, usually water. Sometimes, organic liquids, such as mineral oil or nonvolatile hydrocarbons, are suitable absorption solvents. The choice of solvent depends on cost and solubility of the pollutant in the solvent. Absorption is commonly used to recover products or purify gas streams that have high concentrations of organic compounds. Absorption processes are typically used to recover products or purify gas streams with high concentrations of organic compounds such as in the ethanol production and soybean oil refinery industries.

Condensation: Condensation is the separation of VOCs from an emission stream through a phase change, by increasing the system pressure or, more commonly, lowering the system temperature below the dew point of the VOC vapor. When condensers are used for air pollution control, they usually operate at the pressure of the emission stream, and typically require a refrigeration unit to obtain the temperature necessary to condense the VOCs from the emission stream. These systems are frequently used prior to other control devices (e.g., oxidizers or absorbers) to remove components that may be corrosive or damaging to other parts of the system. Refrigerated condensers are used as air pollution control devices for treating emission streams with high VOC concentrations (usually > 5,000 ppmv). Condensers may be used to control VOC emissions with high VOC concentrations (usually greater than 5,000 ppmv).

Combinations of Reclamation and Destruction Control Methods

In some cases, a combination of control technologies offers the most efficient and cost effective VOC control.

The combination of carbon adsorption with recuperative thermal incineration is available commercially. This system concentrates the VOC stream by using carbon adsorption to remove low concentration VOCs in an emission stream and then uses a lower volume of hot air, commonly one-tenth the original flow, to desorb the pollutants. A recuperative incinerator for destroying pollutants in the concentrated stream is much smaller and has lower supplemental fuel requirement than an incinerator sized for the full emission stream volume.

Absorption systems can also be used to concentrate emission streams to reduce the size of destruction equipment. The concentration effect is not as extreme as with carbon adsorption, a concentrated exhaust stream one quarter the volume of the inlet stream seems to be the practical

limit. Absorption concentrators are typically suited for batch processes or to equalize pollutant concentrations in a variable stream. The physical characteristics that drive the absorption of pollutants into a liquid also limit the opportunity to remove those pollutants from the liquid stream. Fume incinerators typically need supplemental fuel. Concentrated VOC streams with high heat contents obviously require less supplementary fuel than more dilute streams. VOC streams sometimes have a heat content high enough to be self-sustaining, but a supplemental fuel firing rate equal to about 5% of the total incinerator heat input is usually needed to stabilize the burner flame. Natural gas is the most common fuel for VOC incinerators, but fuel oil is an option in some circumstances.

Step 2: Eliminate Technically Infeasible Options

The test for technical feasibility of any control option is whether it is both available and applicable to reducing VOC emissions from emissions units at the Cyrel platemaking facility. The control technologies listed in the previous section are discussed and evaluated below for their technical feasibility.

Destruction Control Methods

Direct Incineration: Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of direct incineration is not a technically feasible option for the Cyrel platemaking facility at this source because direct incineration typically needs VOC inlet concentrations of at least 1500 to 3000 ppm to perform acceptably without requiring significant quantities of supplemental fuel to sustain temperatures. The inlet concentrations for Bemis will be highly variable and will frequently fall well below the 1500 to 3000 ppm minimum range for direct thermal incineration.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a Direct Incineration is not a technically feasible option for the Cyrel platemaking facility at this source.

Recuperative Thermal Oxidation: Recuperative thermal oxidation typically needs VOC inlet concentrations of at least 1500 to 3000 ppm to perform acceptably without requiring significant quantities of supplemental fuel to sustain temperatures. The inlet concentrations for Bemis will be highly variable and will frequently fall well below the 1500 to 3000 ppm minimum range for recuperative thermal incineration.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a Recuperative Thermal Oxidation is not a technically feasible option for the Cyrel platemaking facility at this source.

Regenerative Thermal Oxidation: These systems can handle variable and low-concentration VOC waste streams, which are the types of streams in the Cyrel platemaking facility.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a Regenerative Thermal Oxidization is a technically feasible option for the Cyrel platemaking facility at this source.

Flares: While flares are designed to eliminate waste gas streams, they can cause safety and operational problems and the exhaust stream concentration must be high enough to sustain combustion. The VOC concentration in the Cyrel platemaking facility exhaust stream is too low to sustain usage of a flare.

Based on this, as well as the safety issues associated with flares, IDEM, OAQ has determined that Flaring is not a technically feasible option for the Cyrel platemaking facility at this source.

Reclamation Control Methods

Adsorption: Based on a review of the RBLC, this type of control has been used in the printing and petroleum refinery industries. This type of control is not typically used in photopolymer platemaking system, and based on the boiling point of the solvent being higher than the temperature of the steam used in the recovery stage of the process, it is unknown if the platemaking solvent can be recovered from the carbon bed. The low airflow, low concentration, and very high boiling point of the solvent used all make adsorption not a technically feasible option for the Cyrel platemaking facility.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of Adsorption is not technically feasible option for the Cyrel platemaking facility at this source.

Absorption: Absorption is not considered a technically feasible application for VOC control of emissions from the Cyrel platemaking facility due to the low concentration of VOC in the exhaust.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of Absorption is not technically feasible option for the Cyrel platemaking facility at this source.

Condensation: Condensers are not considered technically feasible for the application of controlling VOC emissions from the Cyrel platemaking facility due to the low concentration of VOC in the exhaust and the wide variety of solvents that may be emitted by Cyrel platemaking facility.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of Condensation is not technically feasible option for the Cyrel platemaking facility at this source.

Combinations of Reclamation and Destruction Control Methods

Because none of the reclamation based technologies are technically feasible or appropriate for a low concentration, variable content emission stream like Bemis', combinations of reclamation and destruction control methods are not technically feasible at Bemis. Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a Combination of Reclamation and Destruction Control Methods is not a technically feasible option for the Cyrel platemaking facility at this source.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of Regenerative Thermal Oxidization and catalytic oxidizers has been identified for control of VOC resulting from Cyrel platemaking facility at Bemis.

Regenerative Thermal Oxidizer - 95% destruction efficiency

Catalytic Oxidizer - 95% destruction efficiency

Step 4: Evaluate the Most Effective Controls and Document the Results

The following table lists the proposed VOC BACT determination along with the existing VOC BACT determinations for BCM operations. All data in the table is based on the information obtained from the permit application submitted by Bemis Company, Inc., the U.S. EPA

RACT/BACT/LAER Clearinghouse (RBLC), and electronic versions of permits available at the websites of other permitting agencies.

There were no entries found for control of VOC emissions from photopolymer platemaking operations in the RBLC database. The entries below are from pharmaceutical, miscellaneous chemical and specific chemical manufacturing.

Company Name / Operation	Process Description	Control Type	Control Efficiency
PROPOSED VOC BACT FOR Cyrel platemaking facility Point Source Emissions			
Bemis Company, Inc. - Terre Haute, IN (Proposed 167-34018-00033)	Cyrel Platemaking facility	Regenerative Thermal Oxidation (RTO) & Catalytic Oxidizer (CO)	95% control of VOC
COMPARABLE BACT DETERMINATIONS (Pharmaceutical, Miscellaneous Chemical, and Specific Chemical Manufacturing)			
Evonik Degussa Corporation – Tippecanoe Laboratories (IN-0146)	BPM* Operations	RTO	98% or 20 ppmv
Evonik Degussa Corporation – Tippecanoe Laboratories (IN-0146)	BPM* Support Operations	Incineration System	98%
Archer Daniels Midland (IA-0088)	Fermentation, Distillation, and Dehydration	CO2 scrubber, distillation NCG scrubber, RTO	98%
New Energy Corporation (IN-0122)	DDGS Cooler System	RTO	98%
(MN-0062)	DGS Drying Operation	Thermal oxidizer	95%
Natureworks (NE-0043)	Polymer Production	Thermal oxidizer	98%
Aventine Renewable Energy (NE-0046)	Pre-Fermentation, Distillation, and DGS Drying Operations	RTO	99%, 50 ppmvd
Flopam (LA-0240)	Thermal Oxidizers	RTO	99%
Flopam (LA-0240)	DADMAC/CM/ADAM/ATBS Plants	Thermal oxidizers	99%
Aventine Renewable Energy (NE-0046)	Pre-Fermentation, Distillation, and DGS Drying Operations	RTO	99%, 50 ppmvd
Red Trail Energy (ND-0020)	DDGS Cooling		20 ppmv

The most stringent VOC emission limitation contained in the comparable BACT Determinations table are 99% reduction and 50 ppmvd, which are associated with chemical manufacturing operations. The Cyrel platemaking facility is not a chemical manufacturing facility.

In evaluating BACT for VOC control of chemical operations, it is important to note that the control efficiency anticipated for a given emission unit/control equipment combination is dependent upon the uncontrolled VOC emission rate and subsequent VOC concentration of the exhaust gas stream. Even though a unit may be listed with high control efficiency in the RBLC, the same control equipment would be expected to have lower control efficiency if the uncontrolled emission rate is lower. Bemis has focused its BACT evaluation on the extent to which the selected control equipment corresponds to the control equipment type utilized at the best-controlled facility identified in RBLC.

The Aventine Renewable Energy Facility proposes a BACT of 99% and 50 ppmvd. One of the existing oxidizers most recent destruction efficiency test showed control levels below the 98% level. Five others were only marginally meeting the 98% level. Therefore, 98% is considered the maximum achievable control efficiency. Bemis currently utilizes a series of RTOs for control of VOCs from their printing presses achieving 95% control efficiency and proposes routing the photopolymer platemaking process (Cryel) emissions to these existing RTOs. Compliance with 98% control efficiency would require installation of new control devices. Bemis has performed an analysis of the cost (Appendix B) to add an additional RTO to the VOC control system for the Cyrel platemaking facility exhaust stream using cost equations contained in the EPA document *Air Pollution Control Cost Manual 6th Ed.* (EPA/452/B-02-00,2002). Based on a control efficiency of 98%, Bemis estimates capital and operating costs for such a system to be:

- Capital cost = $500,000
- Operating costs = $50,000 per year
- Cost effectiveness = $10,989 per ton of VOC controlled

The cost effectiveness to add a new RTO to the Cyrel platemaking facility is clearly beyond the level that would be considered economically reasonable under state and federal guidelines for BACT.

The additional cost for installing a new RTO, based purely on capital costs and assuming no change in operating cost is $10,989/ton, which is outside the range of cost feasibility for VOC. Therefore, achieving 98% control efficiency is not cost effective and not applicable as BACT for Bemis.

After excluding this operation, the 95% control is representative of the most stringent limit in the RBLC, which is the limit proposed for the flexible permit.

Bemis asserts that the limit proposed in its BACT analysis represents the best limit that a regenerative thermal oxidizer (RTO) and catalytic oxidizer capable of meeting without purchasing a new RTO. In order for Bemis to meet a 98% control efficiency, a new RTO would have to be added to the existing control system for Cyrel. Without considering the cost to maintain and operate the unit, the incremental cost per ton of additional VOC controlled would be approximately $10,989.Given the low level of additional VOC removal that this would provide (in comparison with estimated capital and operating costs), IDEM, OAQ concludes that this option would not be considered to be BACT for this unit. Therefore, the most stringent applicable limit for VOC emissions from the platemaking facility is the proposed BACT limit for Cyrel.

Proposal: **Bemis Company, Inc.** – Terre Haute, IN

The following has been proposed as BACT for VOC for Cyrel platemaking facility:

(a) VOC point source emissions: Regenerative Thermal Oxidizer (RTO) and Catalytic Oxidizer to control VOC emissions to 95% of VOC destruction efficiency.

Step 5: Select BACT

Pursuant to 326 IAC 8-1-6 (Prevention of Significant Deterioration (PSD)), IDEM, OAQ has determined the following for VOC BACT for the Cyrel platemaking facility:

(a) Whenever the Photopolymer plate making process, identified as Cyrel, is applying VOC-containing materials, exhaust from that press shall be controlled by the operating Plant 2 oxidation control system, consisting of oxidizers I5, I6, I7, I8, I9, I10, I11, I12, I13, and I14. Cyrel shall have a minimum capture efficiency of 100%. The oxidation control system shall have a minimum destruction efficiency of 95%.

(b) The Cyrel shall not process more than 140,160,000 square inches of plate per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The VOC input shall not exceed 2.16 lbs per thousand square inch of photopolymer material per twelve (12) consecutive month period.

Appendix B - Cost Analyses

Indiana Department of Environmental Management
Office of Air Quality

Source Description and Location

Source Name:	Bemis Company, Inc.
Source Location:	1350 North Fruitridge Ave., Terre Haute, IN 47804
County:	Vigo
SIC Code:	2673 & 3081
Operation Permit No.:	T 167-27050-00033
Operation Permit Issuance Date:	October 28, 2009
Significant Source Modification No.:	167-34018-00033
Permit Reviewer:	Deena Patton

A review was performed of USEPA's RBLC database to identify previous BACT determinations from around the country. No entries were found for control of VOC emissions from photopolymer platemaking operations.

Clearly the minimum control would be the use of a PTE along with the use of Bemis's existing oxidation system that has a minimum destruction efficiency of 95%. This results in a minimum overall control efficiency of 95% as well (100% capture with 95% destruction).

Bemis is aware of other instances where oxidizers have been required to meet higher minimum destruction efficiency levels. Therefore, Bemis has analyzed the incremental cost of control between 95% and 98% overall control.

Bemis' existing oxidation system has sufficient capacity to handle the additional airflow from the Cyrel system without further modification. Any costs associated with making the Cyrel room a PTE would be the same for either scenario, so that cost has not been included in either scenario.

In order to reliably meet a 98% overall control efficiency limit, Bemis believes the installation of a new RTO dedicated to control emissions from the Cyrel system is required. One of the existing oxidizers most recent destruction efficiency test showed control levels below the 98% level. Five others were only marginally meeting the 98% level.

Potential VOC Emissions (Before Control, tpy)	Minimum Overall Control Efficiency	Potential VOC Emissions (After Control, tpy)
151.84	95%	7.59
151.84	98%	3.04

The differential VOC after control is 4.55 tons per year. The capital cost of purchasing and installing a small RTO to control this system is estimated to be no less than $500,000. With an expected operational life of 10 years, the simple cost per year would be $50,000. Without considering the cost to maintain and operate the unit, the incremental cost per ton of additional VOC controlled would be approximately $10,989. Bemis believes this cost is already too high to be considered economically feasible.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Lukas Hendrix
Bemis Company Inc.
1350 Fruitridge Ave.
Terre Haute, Indiana 47804

DATE: March 5, 2015

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V – Significant Source Modification
167-34018-00033

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Gerald Bartz, EHS / Bemis Company Inc.
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

March 5, 2015

TO: Vigo County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Bemis Company, Inc.
Permit Number: 167-34018-00033

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	AWELLS 3/5/2015 Bemis Company Incorporated 167-34018-00033 Final		
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

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2		Gerald Bartz EHS Mgr Bemis Company Incorporated 1350 N Fruitridge Ave Terre Haute IN 47804 *(RO CAATS)*									
3		Vigo County Board of Commissioners County Annex, 121 Oak Street Terre Haute IN 47807 *(Local Official)*									
4		Terre Haute City Council and Mayors Office 17 Harding Ave Terre Haute IN 47807 *(Local Official)*									
5		Vigo County Health Department 147 Oak Street Terre Haute IN 47807 *(Health Department)*									
6		Vigo Co Public Library 1 Library Square Terre Haute IN 47807-3609 *(Library)*									
7		J.P. Roehm PO Box 303 Clinton IN 47842 *(Affected Party)*									
8		Mr. Robert Harmon Bemis Company, Inc. - EHS Department 2200 Badger Avenue Oshkosh WI 54904 *(Source – addl contact)*									
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