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 / Applicant

DATE: July 15, 2013

RE: Multi-Color Corporation / 143-32977-00007

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, 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.

Enclosures
FNPER.dot 6/13/13

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

Mr. Aron Kratky
Multi-Color Corporation
2281 S US 31
Scottsburg, IN 47170

July 15, 2013

Re: 143-32977-00007
Significant Permit Modification to
Part 70 Renewal No.: T143-30351-00007

Dear Mr. Kratky:

Multi-Color Corporation was issued a Part 70 Operating Permit Renewal No. 143-30351-00007 on October 12, 2011 for a stationary describe source located at 2281 South U.S. 31, Scottsburg, Indiana. An application requesting changes to this permit was received on March 20, 2013. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

For your convenience, the entire Part 70 Operating Permit Renewal as modified is attached.

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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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 Josiah Balogun, of my staff, at 317-234-5257 or 1-800-451-6027, and ask for extension 4-5257.

Sincerely,

Tripuran Sinha

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

Attachment(s): Updated Permit, Technical Support Document and Appendix A

TS/JB

cc: File - Scott County
Scott County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Southeast Regional Office

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Multi-Color Corporation
2281 South U.S. 31
Scottsburg, Indiana 47170

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: 143-30351-00007	
Issued by: Chrystal Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: October 12, 2011 Expiration Date: October 12, 2016

Significant Permit Modification No.: 143-32977-00007	
Issued by: Tripurari Sinha Tripurari P. Sinha, Ph.D., Section Chief Permits Branch Office of Air Quality	Issuance Date: July 15, 2013 Expiration Date: October 12, 2016

TABLE OF CONTENTS

A. SOURCE SUMMARY

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(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)]
A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B. GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]
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)]
B.3 Term of Conditions [326 IAC 2-1.1-9.5]
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]
B.5 Severability [326 IAC 2-7-5(5)]
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
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]
B.11 Emergency Provisions [326 IAC 2-7-16]
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
B.14 Termination of Right to Operate [326 IAC 2-7-10][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]
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
B.20 Source Modification Requirement [326 IAC 2-7-10.5]
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]
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
C.2 Opacity [326 IAC 5-1]
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.5 Fugitive Dust Emissions [326 IAC 6-4]
C.6 Stack Height [326 IAC 1-7]
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]
C.8 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]
C.9 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]
C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.16 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]
C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection
C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Presses 1, 2, 4 and 5 Using Compliant Coating Material for 326 IAC 8 Compliance Purposes

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 Graphic Arts Operations [326 IAC 8-5-5] [326 IAC 8-1-12]
D.1.2 Graphic Arts Operations [326 IAC 8-5-5]
D.1.3 PSD Minor Limit [326 IAC 2-2]
D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.1.5 Volatile Organic Compounds (VOC) Control
D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-4][326 IAC 8-1-2(a)]
D.1.7 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.1.8 Thermal Oxidizer Temperature
D.1.9 Catalytic Incinerator Temperature

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.10 Contemporaneous Log for Alternate Operating Scenarios [326 IAC 2-7-5(9)]
D.1.11 Record keeping Requirements [326 IAC 8-1-10]
D.1.12 Record Keeping Requirements
D.1.13 Reporting Requirements [326 IAC 8-1-10]
D.1.14 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Presses 1, 2, 4 and 5 Using Oxidizers for 326 IAC 8 Compliance Purposes

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.2.1 Graphic Arts Operations [326 IAC 8-5-5] [326 IAC 8-1-12]
D.2.2 Graphic Arts Operations [326 IAC 8-5-5] [326 IAC 8-1-12]
D.2.3 PSD Minor Limit [326 IAC 2-2]
D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.2.5 Volatile Organic Compounds (VOC) Control
D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-4][326 IAC 8-1-2(a)]
D.2.7 Testing Requirements [326 IAC 8-1-12]
D.2.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.2.9 Thermal Oxidizer Temperature
D.2.10 Catalytic Incinerator Temperature
D.2.11 Monitoring Requirements [326 IAC 8-1-12]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.2.12 Contemporaneous Log for Alternate Operating Scenarios [326 IAC 2-7-5(9)]
D.2.13 Record Keeping Requirements [326 IAC 8-1-12]
D.2.14 Record Keeping Requirements
D.2.15 Reporting Requirements [326 IAC 8-1-12]
D.2.16 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - Degreasing Operations

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
D.3.2 RESERVED
D.3.3 PSD Minor Limit [326 IAC 2-2]
D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.3.5 Volatile Organic Compounds (VOC)
D.3.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.3.7 Catalytic Incinerator Temperature

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.3.8 Record Keeping Requirements
D.3.9 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS - Insignificant Activities

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.4.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]
D.4.2 RESERVED

Compliance Determination Requirements
D.4.3 RESERVED

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

D.4.4 RESERVED

E.1 FACILITY OPERATION CONDITIONS - NESHAP, Subpart KK

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [40 CFR 63]

E.1.1 General Provisions Relating to NESHAP Subpart KK [326 IAC 20-1] [40 CFR Part 63, Subpart A]

E.1.2 Printing and Publishing Industry) NESHAP [40 CFR 63, Subpart KK] [326 IAC 20-18]

E.1.3 One Time Deadlines Relating to NESHAP, Subpart KK

E.2 FACILITY OPERATION CONDITIONS - NSPS, Subpart Dc

New Source performance Standards (NSPS) [40 CFR 60]

E.2.1 General Provisions Relating to New Source performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

E.2.2 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units [326 IAC 12-1][40 CFR 60, Subpart Dc]

Certification
Emergency Occurrence Report
Quarterly Report
Quarterly Report
Quarterly Deviation and Compliance Monitoring Report

Attachment A - NESHAP, Subpart KK
Attachment B - NSPS, Subpart Dc

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 packaging rotogravure printing operation.

Source Address:	2281 South U.S. 31, Scottsburg, Indiana 47170
General Source Phone Number:	(812) 752-8205
SIC Code:	2754
County Location:	Scott
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major 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) One (1) ten (10) station packaging rotogravure printing press identified as Press #1 (ten stations: P1U1 through P1U10), constructed in May of 1990, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P1U1-P1U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #1 (ten stations: P1U1 through P1U10) are considered an existing affected source.

(b) One (1) nine (9) station packaging rotogravure printing press identified as Press #2 (nine stations: P2U1 through P2U9), constructed in April of 1991, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P2U1-P2U9 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #2 (nine stations: P2U1 through P2U9) are considered an existing affected source.

(c) One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as

S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source; and

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(e) One (1) mechanical spray cold cleaner degreaser, identified as PW2, constructed in April of 2001, with a projected solvent consumption rate of eight (8) gallons per day, utilizing closed-loop solvent recycling and distillation for VOC emissions control, and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(f) One (1) mechanical spray cold cleaner degreaser, identified as PW3, approved for construction in 2010, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing a closed-loop solvent recycling and distillation system, and controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2.

(f) One (1) mechanical spray cold cleaner degreaser, identified as PW4, constructed in 2013, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing closed-loop solvent recycling and distillation system. The volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions from PW4 will be controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(g) One (1) manual cold cleaner degreaser, identified as PW5, constructed in 2013, with a projected solvent consumption rate of forty eight (48) gallon per day and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

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

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

(a) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S005. [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

(b) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6, 326 IAC 8-3-2 or 326 IAC 8-3-5.[326 IAC 8-3-2][326 IAC 8-3-5]

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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, T143-30351-00007, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, 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, or Southeast Regional Office 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
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

(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 T143-30351-00007 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.

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]

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

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

Indiana Department of Environmental Management
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.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.

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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 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.3 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.4 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.5 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.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 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.8 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.9 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.10 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.11 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.12 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.13 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.14 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.15 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.16 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]

Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(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.

Stratospheric Ozone Protection

C.19 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 FACILITY OPERATION CONDITIONS

Presses 1, 2, 4 and 5 Using Compliant Coating Material for 326 IAC 8 Compliance Purpose

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

(a) One (1) ten (10) station packaging rotogravure printing press identified as Press #1 (ten stations: P1U1 through P1U10), constructed in May of 1990, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P1U1-P1U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #1 (ten stations: P1U1 through P1U10) are considered an existing affected source.

(b) One (1) nine (9) station packaging rotogravure printing press identified as Press #2 (nine stations: P2U1 through P2U9), constructed in April of 1991, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P2U1-P2U9 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #2 (nine stations: P2U1 through P2U9) are considered an existing affected source.

(c) One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source; and

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press#5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(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 Graphic Arts Operations [326 IAC 8-5-5]

Pursuant to 326 IAC 8-5-5 (Graphic Arts Operations), the Permittee may not cause, allow, or permit the operation of the facility unless the Permittee uses one of the following types of compliant coatings:

(a) The volatile fraction of the ink, as it is applied to the substrate, contains twenty-five percent (25%) by volume or less of VOC, and seventy-five percent (75%) by volume or more of water; or

(b) The ink as it is applied to the substrate, less water, contains sixty percent (60%) by volume or more nonvolatile material; or

(c) The ink, as applied to the substrate, meets an emission limit of five-tenths (0.5) pounds of VOC per pound of solids in the ink.

D.1.2 Graphic Arts Operations [326 IAC 8-5-5]

Pursuant to 326 IAC 8-5-5(f), work practices for Presses #1, #2, #4 and #5 shall include, but not be limited to, the following:

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

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

D.1.3 PSD Minor Limit [326 IAC 2-2]

The total input of VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1, #2, #4 and #5 (emission units P1U1 through P1U10, P2U1 through P2U9, P4U1 through P4U10 and P5U1 through P5U10) shall be limited to 3,292 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency shall be 94.20%.

Compliance with the above limit in conjunction with Condition D.3.3 and VOC emissions from natural gas combustion, and the insignificant activities will limit source-wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices. 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.1.5 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.1.2, the catalytic oxidizer OXD#5 and thermal oxidizers OXD#6 and OXD#7 shall be in operation and control emissions from the associated presses at all times the associated presses are in operation.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine-compliance using Method 24 in

conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance with Condition D.1.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#5 and OXD#6 no later than 2.5 years from the most recent testing performed on these oxidizers. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Within one eighty (180) days of startup of Press #5, in order to demonstrate the compliance with Condition D.1.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#7. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.1.8 Thermal Oxidizer Temperature

(a) The Permittee shall determine the 3-hour average combustion zone temperature from the most recent valid stack test that demonstrates compliance with the minimum overall VOC control efficiency requirement in condition D.1.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#6 and OXD#7 for measuring combustion zone temperature. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average temperature of the thermal oxidizer is below the temperature determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.9 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with minimum overall VOC control efficiency requirement in condition D.1.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#5 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.10 Contemporaneous Log for Alternate Operating Scenarios [326 IAC 2-7-5(9)]

(a) Pursuant to 326 IAC 2-7-5(9)(A), contemporaneously with making a change from one (1) alternative operating scenario to another, the Permittee shall make a record in a log at the permitted facility of the scenario under which it is operating. The record should state the alternative operating scenario for each station, since different stations at the same press may be operating under different scenarios.

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

D.1.11 Record keeping Requirements [326 IAC 8-1-10]

(a) To document the compliance status with Condition D.1.1, pursuant to 326 IAC 8-1-10(c) (Compliance Certification, Record Keeping and Reporting Requirements for Certain Coating Facilities Using Compliant Coatings), upon changing the method of compliance for an existing coating facility from control devices (326 IAC 8-5- 5(c)(3)(B)) to the use of compliant coatings (326 IAC 8-5-5(c)(1), (2), or (4)), the Permittee shall for each coating facility and for each coating used collect and record each day and maintain all of the following information:

(1) The name and identification number of each coating, as applied;

(2) The mass of VOC (excluding water and exempt compounds) per volume of coating for each coating, as applied, or the VOC content of each coating, as applied, expressed in units necessary to determine compliance;

(3) As new compliant coatings are added to a coating facility, the records required by this condition shall be updated to include the new coating; and

(4) If use of a coating is discontinued, the records required by this section shall be maintained consistent with 326 IAC 8-1-9(c).

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

D.1.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limit and/or the VOC emission limit established in Condition D.1.3. Records necessary to demonstrate compliance shall be available within 30 days at the end of each compliance period.

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

(2) The coatings and solvents applied during each month, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the coating or solvent used.

(3) A log of the dates of use.

(4) The total VOC usage for each month at each press.

(5) The weight of VOCs emitted for each compliance period for each press.

(6) The following operation parameters of catalytic incinerators and thermal oxidizer:

(A) VOC capture efficiency;

(B) VOC destruction efficiency of the control devices;

(C) A description of the data used to establish the capture and destruction efficiencies; and

(D) Continuous temperature readings.

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

D.1.13 Reporting Requirements [326 IAC 8-1-10]

(a) In order to demonstrate compliance with Condition D.1.1, pursuant to 326 IAC 8-5-5(c)(1), (2), or (4) and 326 IAC 8-1-10(d), the Permittee shall notify IDEM, OAQ in either of the following instances:

(1) Any record showing use of any noncompliant coatings shall be reported by submitting a copy of the record to IDEM, OAQ within thirty (30) days following use; such record shall also be submitted with the quarterly compliance monitoring report attached to this permit. The following information shall accompany each submittal:

(A) Name and location of the coating facility;

(B) Time, date, and duration of the noncompliance; and

(C) Corrective action taken.

(2) At least thirty (30) calendar days before changing the method of compliance from the use of compliant coatings (326 IAC 8-5-5(c)(1), (2), or (4)) to control devices (326 IAC 8-5-5(c)(3)(B)), the Permittee shall comply with all requirements of 326 IAC 8-1-12(b) of this rule, respectively. Upon changing the method of compliance for a coating facility from the use of compliant coatings to control devices, the Permittee shall comply with all requirements of 326 IAC 8-1-12.

(b) Pursuant to 326 IAC 8-1-10(b), upon changing the method of compliance for an existing coating facility from control devices (326 IAC 8-5-5(c)(3)(B)) to the use of compliant coatings (326 IAC 8-5-5(c)(1), (2), or (4)), the Permittee shall certify to IDEM, OAQ that the coating facility is in compliance with the requirements of 326 IAC 8-1-10. The certification shall include the following:

(1) The name and location of the source;

(2) The name, address, and telephone number of the person responsible for the source;

(3) Identification of each VOC emitting coating facility and identification of the applicable emission limitation;

(4) The name and identification number of each coating, as applied, used at each coating facility; and

(5) The mass of VOC (excluding water and exempt compounds) per volume of coating and the volume of each coating, as applied.

D.1.14 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.2 FACILITY OPERATION CONDITIONS

Presses 1, 2, 4 and 5 Using Oxidizers for 326 IAC 8 Compliance Purpose

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

(a) One (1) ten (10) station packaging rotogravure printing press identified as Press #1 (ten stations: P1U1 through P1U10), constructed in May of 1990, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P1U1-P1U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #1 (ten stations: P1U1 through P1U10) are considered an existing affected source.

(b) One (1) nine (9) station packaging rotogravure printing press identified as Press #2 (nine stations: P2U1 through P2U9), constructed in April of 1991, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P2U1-P2U9 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #2 (nine stations: P2U1 through P2U9) are considered an existing affected source.

(c) One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source;

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, to be constructed in 2013, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(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 Graphic Arts Operations [326 IAC 8-5-5] [326 IAC 8-1-12]

(a) Pursuant to 326 IAC 8-5-5(c)(3)(B) (Graphic Arts Operations), the Permittee may not cause, allow, or permit the operation of the facility unless the Permittee installs and

operates an incineration system(s) that oxidizes at least ninety percent (90%) of the nonmethane volatile organic compounds (volatile organic compounds measured as total combustible carbon) to carbon dioxide and water.

(b) A capture system must be used in conjunction with each emission control system. The capture system shall attain an efficiency sufficient to achieve an overall control efficiency, in conjunction with the emission control system, of sixty-five percent (65%) for packaging rotogravure processes.

(c) Pursuant to 326 IAC 8-5-5(c)(3)(B), the following shall apply:

(1) Reserved.

(2) The catalytic oxidizing incinerator identified as OXD#5 shall maintain a minimum operating temperature of 600°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(3) The natural gas fired regenerative thermal oxidizer identified as OXD#6 shall maintain a minimum operating temperature of 1500°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(4) The natural gas fired regenerative thermal oxidizer identified as OXD#7 shall maintain a minimum operating temperature of 1500°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(d) Pursuant to 326 IAC 8-1-12 (Compliance Certification, Record Keeping and Reporting Requirements for Certain Coating Facilities Using Control Devices), the presses #1, #2 #4 and #5 are subject to the following requirements when utilizing a thermal and/or catalytic oxidizer to comply with 326 IAC 8-5-5(c)(3)(B):

(1) Each incineration control system shall be operated and maintained according to the manufacturer's recommendations but may be modified based on the results of the initial or subsequent compliance test or upon the written request of IDEM, OAQ.

(2) A copy of the operating and maintenance procedures shall be maintained in a convenient location at the source property and as close to each control system as possible for reference by plant personnel and IDEM, OAQ inspectors.

D.2.2 Graphic Arts Operations [326 IAC 8-5-5]

Pursuant to 326 IAC 8-5-5(f), work practices for Presses #1, #2, #4 and #5 shall include, but not be limited to, the following:

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

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

D.2.3 PSD Minor Limit [326 IAC 2-2]

The total input of VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1, #2, #4 and #5 (emission units P1U1 through P1U10, P2U1 through P2U9, P4U1 through P4U10 and P5U1 through P5U10) shall be limited to 3,292 tons per twelve (12) consecutive month

period with compliance determined at the end of each month. The minimum overall VOC control efficiency shall be 94.20%.

Compliance with the above limit in conjunction with Condition D.3.3 and VOC emissions from natural gas combustion, and the insignificant activities will limit source-wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices. 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.2.5 Volatile Organic Compounds (VOC) Control

In order to comply with Conditions D.2.1 and D.2.3, the catalytic oxidizer OXD#5 and thermal oxidizers OXD#6 and OXD#7 shall be in operation and control emissions from the associated presses at all times the associated presses are in operation.

D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content and usage limitations contained in Conditions D.2.1 and D.2.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine-compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.7 Testing Requirements [326 IAC 8-1-12]

Pursuant to 326 IAC 8-5-5(c)(3)(B) and 326 IAC 8-1-12, each incineration control system shall be tested according to the following schedule and in the following situations:

(a) An initial compliance test shall be conducted. Compliance tests shall be conducted no later than every thirty (30) months after the date of the initial test.

(b) A compliance test shall be conducted whenever the Permittee chooses to operate a control system under conditions different from those that were in place at the time of the previous test.

(c) A compliance test shall be performed within ninety (90) days of:

(1) Startup of a new coating facility;

(2) Changing the method of compliance for an existing coating facility from compliant coatings or daily-weighted averaging to control devices; or

(3) Receipt of a written request from IDEM, OAQ or the U.S. EPA.

(d) All compliance tests shall be conducted according to a protocol approved by IDEM, OAQ at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:

(1) Test procedures;

(2) Operating and control system parameters;

(3) Type of VOC containing process material being used; and

(4) The process and control system parameters that will be monitored during the test.

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance with Condition D.2.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#5 and OXD#6 no later than 2.5 years from the most recent testing performed on these oxidizers. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Within 180 days after the startup of Press #5, in order to demonstrate the compliance with Condition D.2.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#7. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.2.9 Thermal Oxidizer Temperature

(a) The Permittee shall determine the 3-hour average combustion zone temperature from the most recent valid stack test that demonstrates compliance with Conditions D.2.1 and D.2.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#6 and OXD#7 for measuring combustion zone temperature. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average temperature of the thermal oxidizer is below the temperature determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.10 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with Conditions D.2.1 and D.2.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#5 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or

Exceedances shall be considered a deviation from this permit.

D.2.11 Monitoring Requirements [326 IAC 8-1-12]

Pursuant to 326 IAC 8-5-5(c)(3)(B) and 326 IAC 8-1-12, the monitoring equipment requirements shall be as follows:

(a) When the thermal incinerator is used for VOC reduction, a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees Centigrade, or plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is more accurate; and

(b) When a catalytic incinerator is used for VOC reduction, a temperature device capable of continuously recording the temperature in the gas stream immediately before and after the catalyst bed of each incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees Centigrade, or plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is more accurate.

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

D.2.12 Contemporaneous Log for Alternate Operating Scenarios [326 IAC 2-7-5(9)]

(a) Pursuant to 326 IAC 2-7-5(9)(A), contemporaneously with making a change from one (1) alternative operating scenario to another, the Permittee shall make a record in a log at the permitted facility of the scenario under which it is operating. The record should state the alternative operating scenario for each station, since different stations at the same press may be operating under different scenarios.

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

D.2.13 Record Keeping Requirements [326 IAC 8-1-12]

(a) Pursuant to 326 IAC 8-1-12(c), upon changing the method of compliance for an existing coating facility from the use of compliant coatings (326 IAC 8-5-5(c)(1), (2), or (4)) to control devices (326 IAC 8-5-5(c)(3)(B)), the Permittee shall collect and record each day and maintain all of the following information for each coating facility:

(1) The name and identification of each coating used at each coating facility.

(2) The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating expressed in units necessary to determine compliance, used each day at each coating facility.

(3) The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of the coatings used each day on each coating facility.

(4) The required overall emission reduction efficiency for each day for each coating facility.

(5) The actual overall emission reduction efficiency achieved for each day for each coating facility as determined during the compliance test required by Condition D.2.9 pursuant to 326 IAC 8-1-12(b)(1)(C).

(6) Control device monitoring data as follows:

(A) For the thermal incinerator, the following:

(i) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator; and

(ii) Records of all three (3) hour periods of operation in which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) (twenty-eight degrees Centigrade (28°C)) below the average combustion temperature that existed during the most recent test that demonstrated that the coating facility was in compliance.

(B) For each catalytic incinerator, the following:

(i) Continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator;

(ii) Records of all three (3) hour periods of operation in which the average temperature measured at the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit (50°F) (twenty-eight degrees Centigrade (28°C)) below the average temperature of the process vent stream that existed during the most recent test that demonstrated that the coating facility was in compliance; and

(iii) Records of all three (3) hour periods of operation in which the average temperature difference across the catalyst bed is less than eighty percent (80%) of the temperature difference measured during the most recent test that demonstrated that the coating facility was in compliance.

(7) A log of operating time for each capture system, control device, monitoring equipment, and the associated coating facility.

(8) A maintenance log for each capture system, control device, and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages.

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

D.2.14 Record Keeping Requirements

(a) To document compliance with Condition D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limit and/or the VOC emission limit established in Condition D.2.3. Records necessary to demonstrate compliance shall be available within 30 days at the end of each compliance period.

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

(2) The coatings and solvents applied during each month, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the coating or solvent used.

(3) A log of the dates of use;

(4) The total VOC usage for each month at each press;

(5) The weight of VOCs emitted for each compliance period for each press; and

(6) The following operation parameters of catalytic incinerators and thermal oxidizer:

(A) VOC capture efficiency;

(B) VOC destruction efficiency of the control devices;

(C) A description of the data used to establish the capture and destruction efficiencies; and

(D) Continuous temperature readings.

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

D.2.15 Reporting Requirements [326 IAC 8-1-12]

Pursuant to 326 IAC 8-5-5(c)(3)(B) and 326 IAC 8-1-12, the Permittee shall notify IDEM, OAQ in either of the following instances:

(a) Any record showing noncompliance with the applicable requirements for control devices shall be reported by submitting a copy of the record to IDEM, OAQ within thirty (30) days following noncompliance; such record shall also be submitted with the quarterly compliance monitoring report attached to this permit. The following information shall accompany each submittal:

(1) Name and location of the coating facility;

(2) Identification of the control system where the noncompliance occurred and the coating facility it served;

(3) Time, date and duration of the noncompliance; and

(4) Corrective action taken.

(b) At least thirty (30) calendar days before changing the method of compliance from control devices (326 IAC 8-5-5(c)(3)(B)) to the use of compliant coatings (326 IAC 8-5-5(c)(1), (2),or (4)), the Permittee shall comply with all applicable requirements of 326 IAC 8-1-10(b). Upon changing the method of compliance from control devices to the use of compliant coatings, the Permittee shall comply with all requirements of 326 IAC 8-1-10(b), applicable to the coating facility subject to 326 IAC 8-5-5.

D.2.16 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) One (1) mechanical spray cold cleaner degreaser, identified as PW2, constructed in April of 2001, with a projected solvent consumption rate of eight (8) gallons per day, utilizing closed-loop solvent recycling and distillation for VOC emissions control, and controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2.

(b) One (1) mechanical spray cold cleaner degreaser, identified as PW3, approved for construction in 2010, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing a closed-loop solvent recycling and distillation system, and controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2.

(c) One (1) mechanical spray cold cleaner degreaser, identified as PW4, constructed in 2013, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing closed-loop solvent recycling and distillation system. The volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions from PW4 will be controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(d) One (1) manual cold cleaner degreaser, identified as PW5, constructed in 2013, with a projected solvent consumption rate of forty eight (48) gallon per day and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(e) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to [326 IAC 20-6], [326 IAC 8-3-2] and [326IAC 8-3-5].

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

(a) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:

(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 Permittee 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 (b)(1)(A) through (D) of this condition 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.3.2 Reserved

D.3.3 PSD Minor Limit [326 IAC 2-2]

The total VOC usage at PW2 through PW5 shall be limited to 174 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The minimum overall VOC control efficiency shall be 94.20%.

Compliance with the above limit in conjunction with Condition D.2.3/D.3.3 and VOC emissions from natural gas combustion, and the insignificant activities will limit source wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their 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.3.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the solvent manufacturer.

D.3.6 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.3.3, the catalytic oxidizer OXD#2 shall be in operation and control emissions from the part washers at all times when the part washers are in operation.

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the after the issuance of this permit SSM 143-32975-00007, in order to demonstrate the compliance with Condition D.3.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#2. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.3.8 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with Condition D.3.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#2 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.9 Record Keeping Requirements

(a) To document compliance with Conditions D.3.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Conditions D.3.3.

(1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) A log of the dates of use.

(3) The cleanup solvent usage for each month.

(4) The total VOC usage in parts washer PW2 and PW3 for each month.

(5) The weight of VOC emitted for each compliance period.

(6) The following operation parameters of catalytic oxidizer:

(A) VOC capture efficiency;

(B) VOC destruction efficiency of the control devices;

(C) A description of the data used to establish the capture and destruction efficiencies; and

(D) Continuous temperature readings.

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

D.3.10 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.3.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S005 [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

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

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

D.4.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the 10.0 MMBtu per hour heat input boiler shall be limited to 0.6 pounds per MMBtu heat input.

D.4.2 **RESERVED**

Compliance Determination Requirements

D.4.3 **RESERVED**

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

D.4.4 **RESERVED**

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) ten (10) station packaging rotogravure printing press identified as Press #1 (ten stations: P1U1 through P1U10), constructed in May of 1990, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P1U1-P1U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #1 (ten stations: P1U1 through P1U10) are considered an existing affected source.

(b) One (1) nine (9) station packaging rotogravure printing press identified as Press #2 (nine stations: P2U1 through P2U9), constructed in April of 1991, with a maximum line speed of 840 feet per minute (ft/min) when printing with ink and 740 ft/min when printing with ink and adhesive, and one (1) natural gas fired press dryer system with a total heat input rate of 7.76 million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P2U1-P2U9 are controlled by one (1) natural gas fired regenerative thermal oxidizer, identified as OXD#6, with a maximum design capacity of 9 MMBtu/ hr, exhausting through one (1) stack identified as SOXD6. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #2 (nine stations: P2U1 through P2U9) are considered an existing affected source.

(c) One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source.

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, to be constructed in 2013, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NESHAP Subpart KK [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.823, 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, as specified in Table 1 of 40 CFR Part 63, Subpart KK in accordance with schedule in 40 CFR 63

Subpart KK.

E.1.2 Printing and Publishing Industry) NESHAP [40 CFR 63, Subpart KK] [326 IAC 20-18]

Pursuant to CFR Part 63, Subpart KK, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart KK (included as Attachment A), which are incorporated by reference as 326 IAC 20-18-1, as specified below.

(a) 40 CFR 63.820 (a)
(b) 40 CFR 63.821
(c) 40 CFR 63.822
(d) 40 CFR 63.823
(e) 40 CFR 63.825
(f) 40 CFR 63.826 (a) and (c)
(g) 40 CFR 63.827
(h) 40 CFR 63.828
(i) 40 CFR 63.829, except 40 CFR 63.829 (f)
(j) 40 CFR 63.830
(k) 40 CFR 63.831

E.1.3 One Time Deadlines Relating to NESHAP, Subpart KK

The Permittee shall conduct the performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by May 30, 1999. The initial performance test was conducted on January 15, 1999.

SECTION E.2 FACILITY OPERATION CONDITIONS

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

(a) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S004 [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

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

New Source Performance Standards (NSPS) Requirements [40 CFR 60]

E.2.1 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the Boiler, identified as TH2 except as otherwise specified in 40 CFR Part 60, Subpart Dc.

E.2.2 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60 Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units for the Boiler, identified as TH2 as specified as follows:

1. 40 CFR 60.40c(a),(b),(c) and (d)
2. 40 CFR 60.41c
3. 40 CFR 60.48c(a),(a)(1), (1)(3), (g) and (i).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Multi-Color Corporation
Source Address: 2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.: T143-30351-00007

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: Multi-Color Corporation
Source Address: 2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.: T143-30351-00007

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: _____

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

Part 70 Quarterly Report

Source Name: Multi-Color Corporation
Source Address: 2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.: T143-30351-00007
Facility: Presses #1, #2, #4 and #5 emission units P1U1-10, P2U1-9, P4U1-10 and P5U1-10
Parameter: Volatile organic compounds (VOC) usage
Limit: The total input VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1, #2, #4 and #5 (emission units P1U1 through P1U10, P2U1 through P2U9, P4U1 through P4U10 and P5U1 through P5U10) shall be limited to 3,292 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: Multi-Color Corporation
Source Address: 2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.: T143-30351-00007
Facility: Parts Washers PW2 through PW5
Parameter: Volatile organic compounds (VOC) usage
Limit: The total VOC usage at PW2 through PW5 shall be limited to 174 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 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Multi-Color Corporation
Source Address: 2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.: T143-30351-00007

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, 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
to Part 70 Operating Permit Renewal No. T143-30351-00007

Multi-Color Corporation
2281 South U.S. 31, Scottsburg, Indiana 47170

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

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

§ 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.

$$C_{aki} = \frac{\left(C_{ki} M_i + \sum_{j=1}^{q} C_{kij} M_{ij} \right)}{M_i + \sum_{j=1}^{q} M_{ij}} \qquad Eq\ 3$$

(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.

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

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.

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

(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.

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

(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.

$$H = \left[\sum_{i=1}^{p} M_{Ci} C_{ki} + \sum_{j=1}^{q} M_{Cj} C_{kj}\right]\left[1 - \frac{M_{vr}}{\sum_{i=1}^{p} M_{Ci} C_{vi} + \sum_{j=1}^{q} M_{Cj}}\right] + \left[\sum_{i=1}^{p} M_{Bi} C_{ki} + \sum_{j=1}^{q} M_{Bj} C_{kj}\right] \qquad Eq\ 18$$

(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).

$$H = \left[\sum_{i=1}^{p} M_{Ci} C_{ki} + \sum_{j=1}^{q} M_{Cj} C_{kj}\right]\left[1 - \left(\frac{E}{100}\,\frac{F}{100}\right)\right] + \left[\sum_{i=1}^{p} M_{Bi} C_{ki} + \sum_{j=1}^{q} M_{Bj} C_{kj}\right] \qquad Eq\ 19$$

(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:

$$M_f = Q_{sd} C_c [12.0] [0.0416] [10^{-6}] \qquad \text{Eq. 20}$$

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)–(b)(2)(v)	No.	
§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.

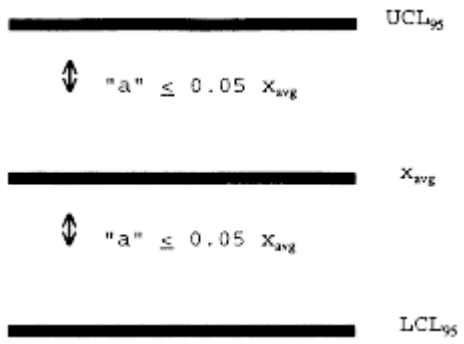
2.6 If the source can demonstrate to the regulatory agency that a test run should not be considered due to an identified testing or analysis error such as spillage of part of the sample during shipping or an upset or improper operating conditions that is not considered part of normal operation then the 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).



View or download PDF

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:

$$s = \left[\frac{\sum_{i=1}^{n} \left(x_i - x_{avg} \right)^2}{n-1} \right]^{0.5} \qquad Eq\ 3 \qquad x_{avg} = \frac{\sum_{i=1}^{n} x_i}{n} \qquad Eq\ 4$$

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

$$a = \frac{(4.30)(4.51)}{\sqrt{n}} = 11.20 \qquad Eq\ 5 \quad P = \frac{11.2}{100.8} 100 = 11.11 \qquad Eq\ 6$$

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

$$a = \frac{(2.57)(6.11)}{\sqrt{6}} = 6.41 \qquad Eq\ 7 \quad P = \frac{6.41}{96.6}100 = 6.64 \qquad Eq\ 8$$

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

$$a = \frac{(2.31)(5.33)}{\sqrt{9}} = 4.10 \qquad Eq\ 9 \quad P = \frac{4.10}{95.7}100 = 4.28 \qquad Eq\ 10$$

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:

$$LC_1 = x_{avg} - \frac{t_{0.20}\, s}{\sqrt{n}} \qquad \text{Eq. 11}$$

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_1exceeds (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_1will 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]

Attachment B to a Part 70 Operating Permit Renewal

No. T143-30351-00007

Multi-Color Corporation
2281 South U.S. 31, Scottsburg, Indiana 47170

Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

SOURCE: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§ 60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in § 60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under § 60.14.

(e) Affected facilities (*i.e.* heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart.

(g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

(h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_x standards under this subpart and the SO_2 standards under subpart J or subpart Ja of this part, as applicable.

(i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see § 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17).

Dry flue gas desulfurization technology means a SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases

of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formationsbeneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO_2 emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2 .

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.42c Standard for sulfur dioxide (SO_2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO_2 emissions limit or the 90 percent SO_2 reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2 emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in

excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO_2 emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 215 ng/J (0.50 lb/MMBtu);

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or

greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under § 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2 emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and § 60.8, compliance with the percent reduction requirements and SO_2 emission limits under § 60.42c is based on the average percent reduction and the average SO_2 emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2 emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{ho} o) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{ao} o). The E_{ho} o is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ho} o = Adjusted E_{ho} , ng/J (lb/MMBtu);

E_{ho} = Hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_g$ o) is computed from E_{ao} o from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai} o) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E_{ao}^{\circ}}{E_{ai}^{\circ}}\right)$$

Where:

$\%R_g$ o = Adjusted $\%R_g$, in percent;

E_{ao} o = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{ai} o = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai} o, an adjusted hourly SO_2 inlet rate (E_{hi} o) is used. The E_{hi} o is computed using the following formula:

$$E_{hi}o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi} o = Adjusted E_{hi} , ng/J (lb/MMBtu);

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0; and

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in § 60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A-2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A-3 of this part or 17 of appendix A-6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2 or CO_2 measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A-4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under § 60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under § 60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2 (or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O2 (or CO_2), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in § 60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.,* reference method) data and performance test (*i.e.,* compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (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.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under § 60.43c(e)(4) shall follow the applicable procedures under § 60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2 emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO_2 concentrations and either O_2 or CO_2 concentrations at both the inlet and outlet of the SO_2 control device.

(b) The 1-hour average SO_2 emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO_2 emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under § 60.13(h)(2). Hourly SO_2 emission rates are not calculated if the

affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO_2 CEMS at the inlet to the SO_2 control device shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted, and the span value of the SO_2 CEMS at the outlet from the SO_2 control device shall be 50 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO_2 CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2 input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2 at the inlet or outlet of the SO_2 control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO_2 and CO_2 measurement train operated at the candidate location and a second

similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under § 60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under § 60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in § 60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in § 60.11 to demonstrate compliance with the applicable limit in § 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.,* 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.,* 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in § 60.45c(a)(8).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in § 60.43c(c) are not required to operate a COMS if they follow the applicable procedures in § 60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in § 60.45c(c). The CEMS specified in paragraph § 60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in § 60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2 , or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in § 60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in § 60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An owner or operator of an affected facility that is subject to an opacity standard in § 60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.

(1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section § 60.48Da of this part.

(2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section § 60.48Da of this part.

(3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.48c(c).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2 emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in § 60.7, the owner or operator of an affected facility subject to the opacity limits in § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2 or diluent (O_2 or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have

been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether

the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO_2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**Multi-Color Corporation**
Source Location:	**2281 South U.S. 31, Scottsburg, Indiana 47170**
County:	**Scott**
SIC Code:	**2754**
Operation Permit No.:	**T 143-30351-00007**
Operation Permit Issuance Date:	**October 12, 2011**
Significant Source Modification No.:	**143-32975-00007**
Significant Permit Modification No.:	**143-32977-00007**
Permit Reviewer:	**Josiah Balogun**

Existing Approvals

The source was issued Part 70 Operating Permit No. 143-30351-00007 on October 12, 2011. Since the issuance of the Part 70 Operating Permit renewal the source has not been issued any other approval.

County Attainment Status

The source is located in Scott County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Scott County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Scott County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore,

direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Scott County has been classified as attainment or unclassifiable in Indiana for all 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 and 326 IAC 2-3, 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 and Emission Offset.

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	0.38
PM_{10}	1.51
$PM_{2.5}$	--
SO_2	0.12
VOC	238.49
CO	16.67
NO_X	19.85
GHGs as CO_2e	23,965.00
HAPs	
Single HAP	> 10
Total HAPs	**> 25**

NOTE: Corrected emissions by the source from the 2011 renewal

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more, emissions of GHGs are less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) `This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major 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 Multi-Color Corporation on March 20, 2013, relating to the followings:

1. Removal of rotogravure Press# 3 (8 unit - 800 fpm);
2. Installation of rotogravure Press# 5 (10 unit - 1,600 fpm);
3. Installation of a Regenerative Thermal Oxidizer for new Press# 5 (50,000 cfm);
4. Installation of a hot oil boiler for new Press# 5 (10 MMBTU/hr);

5. Installation of a mechanical cold-cleaning parts washer (20 cycles/day);
6. Installation of a manual cold-cleaning parts washer;
7. Installation of a seaming machine (500 mpm);
8. Replacement of Press line 3 into catalytic oxidizer 2 (OXD#2) with parts washers 2, 3, 4, & manual wash station; and
9. Expansion of the permanent total enclosure.

The following is a list of the proposed and modified emission unit(s) and pollution control device(s):

(a) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, to be constructed in 2013, with a maximum design capacity of 14.5 MMBtu/hr, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(b) One (1) mechanical spray cold cleaner degreaser, identified as PW4, constructed in 2013, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing closed-loop solvent recycling and distillation system. The volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions from PW4 will be controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(c) One (1) manual cold cleaner degreaser, identified as PW5, constructed in 2013, with a projected solvent consumption rate of forty eight (48) gallon per day and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(d) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S005. [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4]

(e) One (1) seaming machine, identified as Seam Mach 2, has a maximum application rate of 31 pounds of solvent per 1,000,000 meters of substrate; and a run speed of 500 meters per minute (mpm) constructed in 2013.

Enforcement Issues

There are no pending enforcement actions related to this modification.

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.

Increase in PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	0.2
PM_{10}	0.81
$PM_{2.5}$	0.81
SO_2	0.07
VOC	6171.9
CO	9.01
NO_X	10.73
GHGs as CO2e	12956.00

This source modification is subject to 326 IAC 2-7-10.5 (g)(4)(D) because the volatile organic compound (VOC) emissions for the project is greater than 25 TPY. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1), because the modification requires a case by case determination of the emission limits.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit 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**
New Modification								
Press #5	0	0	0	0	91.86	0	0	0
Part washer PW4	0	0	0	0	0.87	0	0	0
Manual part washer PW5	0	0	0	0	3.54	0	0	0
Hot oil boiler	0.08	0.33	0.33	0.03	0.24	3.68	4.38	5,288
Seaming Mach	0	0	0	0	4.07	0	0	0
OXD #7	0.12	0.48	0.48	0.04	0.35	5.33	6.35	7,668
Total for Modification	**0.2**	**0.82**	**0.82**	**0.06**	**100.93**	**9.01**	**10.73**	**12,956**

	Potential to Emit After Issuance (ton/yr)							
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**GHGs**
Source-wide Emissions								
Natural Gas	0.53	2.12	2.12	0.17	1.54	23.48	27.95	33,748
OXD # 2, 5, 6 and 7	--	--	--	--	---	--	---	
Presses #1, #2, #4 and #5	--	--	--	--	190.95	--	--	--
Degreasing (PW2+PW3+PW4+ Manual)	--	--	--	--	10.09	--	--	--
Insignificant Activities	--	--	--	--	11.20	--	--	--
Total After Modification	0.53	2.12	2.12	0.17	213.76	23.48	27.95	33,748
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO_2e

This modification to an existing minor stationary source is not major because the emissions increase is less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to the 2013 modification.

Federal Rule Applicability Determination

(a) 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)
Press #5 (VOC)	Y	Y	6091.36	353.3	100	Y	Y
Press #5 (HAPs)	Y	N	2932	146	10/25	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Press #5 for VOC emissions upon issuance of this permit modification.

(b) The requirements of Standards of Performance for Small Industrial Commercial Institutional Steam Generating Units 40 CFR 60, Subpart Dc are applicable to steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). The boiler, identified as TH2 has a heat input capacity equal to10 MMBtu/hr; therefore Subpart Dc apply to this boiler.

1. 40 CFR 60.40c(a),(b),(c) and (d)
2. 40 CFR 60.41c
3. 40 CFR 60.48c(a),(a)(1), (1)(3), (g) and (i).

(c) The press #5 at this source is not publication rotogravure printing press, 40 CFR Part 60, Subpart QQ (Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing). Therefore, the requirements of this NSPS are not included in the permit

(d) This source is subject to the requirements of this NESHAP 40 CFR Part 63, Subpart KK (National Emissions Standards for Printing and Publishing Industry) (which is incorporated by reference as 326 IAC 20-18) because this source performs packaging rotogravure printing and is a major source of HAPs. Therefore, new press #5 is subject to the requirements of this rule. All the requirements of 40 CFR Subpart KK has been included in Section E.1 of the permit.

State Rule Applicability Determination

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This modification to an existing minor stationary source is not major because the emissions from this modification are limited to less than the major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of Press #5 will emit greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs). Therefore, 326 IAC 2-4.1 would apply to this unit, however, pursuant to 326 IAC 2-4.1-1(b)(2), because this emission unit is specifically regulated by NESHAP 40 CFR 63, Subpart KK, which was issued pursuant to Section 112(d) of the CAA, this emission unit is exempt from the requirements of 326 2-4.1.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission Limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the hot oil boilers, identified as TH2 shall not exceed 0.599 pounds per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Q = total source heat input capacity (MMBtu/hr).
For these units, Q = 10.0 MMBtu/hr.

326 IAC 8-3-2 (Cold Cleaner Operations)
The requirements of 326 IAC 8-3-2 apply to PW4 and PW5 operations because these facilities were constructed after 1980 and these facilities have potential VOC emissions more than 15 lbs/day.

326 IAC 8-1-6 (New facilities; general reduction requirements)
The packaging rotogravure printing, identified as Press #5 was constructed after January 1, 1980 and has potential VOC emissions greater than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) are applicable to this unit, however the unit is subject to 326 IAC 8-5-5 (Graphic Arts Operations), therefore, the packaging rotogravure printing, identified as Press #5 is exempt from the requirement of 326 IAC 8-1-6.

326 IAC 8-5-5 (Graphic Arts Operations)
The packaging rotogravure printing, identified as Press #5 is subject to 326 IAC 8-5-5 because This emission unit is constructed after 1980 and has potential VOC emissions greater than 25 tons per year.

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.

The compliance determination requirements applicable to this source are below.

Emission Unit	Control Device	Pollutant	Limit	Rule Citation	Timeframe for Testing	Frequency of Testing
Press #5	OXD#7	VOC	overall VOC control efficiency (as the product of destruction efficiency and capture efficiency) shall be at least 94.20%	PSD Minor Limit [326 IAC 2-2]	one eighty (180) days after the startup of Press #5	every 2.5 years

The compliance monitoring requirements applicable to this source are as follows:

Emission Unit	Control	Parameter	Frequency
Press #5	OXD#7	combustion temperature	continuous

The above Compliance monitoring Requirements for Press #5 will ensure that the thermal oxidizers, identified as OXD#7 operate properly in order to comply with 326 IAC 2-2, 326 IAC 8-5, and CAM (40 CFR 64)

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No.143-30531-00007. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: The new emission units have been added to Section A2 - Emission Units and Pollution Control Equipment Summary of the permit and Press #3 and it associated emission units have been removed from the permit.

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:

.....

(c) ~~One (1) eight (8) station packaging rotogravure printing press identified as Press #3 (eight stations: P3U1 through P3U8), constructed in April of 1997, with a maximum line speed of 800 ft/min when printing with ink and 700 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P3U1-P3U8 are controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #3 (eight stations: P3U1 through P3U8) are considered an existing affected source.~~

~~(d)~~ One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source; and

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(e) One (1) mechanical spray cold cleaner degreaser, identified as PW2, constructed in April of 2001, with a projected solvent consumption rate of eight (8) gallons per day, utilizing closed-loop solvent recycling and distillation for VOC emissions control, and **controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2** ~~exhausting through one (1) stack (S/V ID: S-MR1)~~.

(f) One (1) mechanical spray cold cleaner degreaser, identified as PW3, approved for construction in 2010, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing a closed-loop solvent recycling and distillation system, and **controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2** ~~venting indoors~~.

(f) One (1) mechanical spray cold cleaner degreaser, identified as PW4, constructed in 2013, with a projected solvent consumption rate of twelve (12) gallons per day,

utilizing closed-loop solvent recycling and distillation system. The volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions from PW4 will be controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(g) One (1) manual cold cleaner degreaser, identified as PW5, constructed in 2013, with a projected solvent consumption rate of forty eight (48) gallon per day and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

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

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

(a) ~~Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:~~

~~(1) One (1) natural gas fired hot oil boiler identified as TH1 used to heat Press #3, rated at 6 MMBtu per hour and exhausting through one (1) stack identified as S004. [326 IAC 6-2-4]~~

One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S005. [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

~~(c) Other categories with emissions below insignificant thresholds:~~

~~(1) One (1) Offset Gravure Coater station, with a maximum line speed of 1000 feet per minute and a printing width of 42 inches with maximum coverage of 4.74 pounds per million square inches. [326 IAC 8-2-5]~~

Change 2: The new emission units have been added to Sections D.1, D.2, D.3, D.4, E.1 and E.2. New conditions and revised conditions have also been added to these sections. The reporting forms have been revised in the permit.

SECTION D.1 FACILITY OPERATION CONDITIONS

Presses 1, 2, 4 and 5 ~~through 4~~ Using Compliant Coating Material for 326 IAC 8 Compliance Purpose

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

(c) ~~One (1) eight (8) station packaging rotogravure printing press identified as Press #3 (eight stations: P3U1 through P3U8), constructed in April of 1997, with a maximum line speed of 800 ft/min when printing with ink and 700 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P3U1-P3U8 are controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #3 (eight stations: P3U1 through P3U8) are considered an existing affected source; and~~

~~(d)~~ One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the

packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source.

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press#5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(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 Graphic Arts Operations [326 IAC 8-5-5]

Pursuant to 326 IAC 8-5-5(f), work practices for Presses #1**, #2,** ~~through~~ #4 **and #5** shall include, but not be limited to, the following:

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

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

D.1.3 PSD Minor Limit [326 IAC 2-2]

The total input of VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1**, #2,** ~~through~~ #4 **and #5** (emission units P1U1 through P1U10, P2U1 through P2U9, ~~P3U1 through P3U8~~, ~~and~~ P4U1 through P4U10 **and P5U1 through P5U10**) shall be limited to ~~3,458~~ **3,292** tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency shall be 94.20%.

Compliance with the above limit in conjunction with Condition D.3.3 and VOC emissions from natural gas combustion, and the insignificant activities will limit source-wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices. 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.1.5 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.1.2, the ~~thermal oxidizers~~ **catalytic oxidizer** ~~OXD#2,~~ OXD#5 and **thermal oxidizers** OXD#6 **and OXD#7** shall be in operation and control emissions from the associated presses at all times the associated presses are in operation.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with

the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance with Condition D.1.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on ~~OXD#2,~~ OXD#5 and OXD#6 no later than 2.5 years from the most recent testing performed on these oxidizers. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Within one eighty (180) days of startup of Press #5, in order to demonstrate the compliance with Condition D.1.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#7. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.1.8 Thermal Oxidizer Temperature **[40 CFR 64]**

(a) The Permittee shall determine the 3-hour average combustion zone temperature from the most recent valid stack test that demonstrates compliance with the minimum overall VOC control efficiency requirement in condition D.1.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#6 **and OXD#7** for measuring combustion zone temperature. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average temperature of the thermal oxidizer is below the temperature determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.9 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with minimum overall VOC control efficiency requirement in condition D.1.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on ~~OXD#2 and~~ OXD#5 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

.....

D.1.14 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

~~A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

SECTION D.2 FACILITY OPERATION CONDITIONS

Presses 1, 2, 4 and 5 ~~through 4~~ Using Oxidizers for 326 IAC 8 Compliance Purpose

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

****

(c) ~~One (1) eight (8) station packaging rotogravure printing press identified as Press #3 (eight stations: P3U1 through P3U8), constructed in April of 1997, with a maximum line speed of 800 ft/min when printing with ink and 700 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P3U1-P3U8 are controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #3 (eight stations: P3U1 through P3U8) are considered an existing affected source; and~~

~~(d)~~ One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source.

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, to be constructed in 2013, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

(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 Graphic Arts Operations [326 IAC 8-5-5] [326 IAC 8-1-12]

.....

(c) Pursuant to 326 IAC 8-5-5(c)(3)(B), the following shall apply:

(1) **Reserved** ~~The catalytic oxidizing incinerator identified as OXD#2 shall maintain a minimum operating temperature of 600°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.~~

(2) The catalytic oxidizing incinerator identified as OXD#5 shall maintain a minimum operating temperature of 600°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(3) The natural gas fired regenerative thermal oxidizer identified as OXD#6 shall maintain a minimum operating temperature of 1500°F or at least a temperature

determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(4) The natural gas fired regenerative thermal oxidizer identified as OXD#7 shall maintain a minimum operating temperature of 1500°F or at least a temperature determined in the most recent compliance test to maintain a minimum 90% destruction of the nonmethane VOC captured.

(d) Pursuant to 326 IAC 8-1-12 (Compliance Certification, Record Keeping and Reporting Requirements for Certain Coating Facilities Using Control Devices), the presses #1, **#2** ~~through~~ #4 **and #5** are subject to the following requirements when utilizing a thermal and/or catalytic oxidizer to comply with 326 IAC 8-5-5(c)(3)(B):

.....

D.2.2 Graphic Arts Operations [326 IAC 8-5-5]

Pursuant to 326 IAC 8-5-5(f), work practices for Presses #1, **#2** ~~through~~ #4 **and #5** shall include, but not be limited to, the following:

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

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

D.2.3 PSD Minor Limit [326 IAC 2-2]

The total input of VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1, **#2, #4 and #5** ~~through #4~~ (emission units P1U1 through P1U10, P2U1 through P2U9, ~~P3U1 through P3U8, and~~ P4U1 through P4U10 **and P5U1 through P5U10**) shall be limited to ~~3,458~~ **3,292** tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency shall be 94.20%.

Compliance with the above limit in conjunction with Condition D.3.3 and VOC emissions from natural gas combustion, and the insignificant activities will limit source-wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices. 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.2.5 Volatile Organic Compounds (VOC) Control

In order to comply with Conditions D.2.1 and D.2.3, the ~~thermal oxidizers~~ **catalytic oxidizer** ~~OXD#2~~, OXD#5 and **thermal oxidizers** OXD#6 **and OXD#7** shall be in operation and control emissions from the associated presses at all times the associated presses are in operation.

.....

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate the compliance with Condition D.2.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on ~~OXD#2,~~ OXD#5 and OXD#6 no later than 2.5 years from the most recent testing performed on these oxidizers. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Within 180 days after the startup of Press #5, in order to demonstrate the compliance with Condition D.2.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#7. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.2.9 Thermal Oxidizer Temperature **[40 CFR 64]**

(a) The Permittee shall determine the 3-hour average combustion zone temperature from the most recent valid stack test that demonstrates compliance with Conditions D.2.1 and D.2.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#6 **and OXD#7** for measuring combustion zone temperature. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average temperature of the thermal oxidizer is below the temperature determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.10 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with Conditions D.2.1 and D.2.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on ~~OXD#2 and~~ OXD#5 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

.....

D.2.16 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.2.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

~~A quarterly summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days~~

~~after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) One (1) mechanical spray cold cleaner degreaser, identified as PW2, constructed in April of 2001, with a projected solvent consumption rate of eight (8) gallons per day, utilizing closed-loop solvent recycling and distillation for VOC emissions control, and **controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2** ~~exhausting through one (1) stack (S/V ID: S-MR1)~~.

(b) One (1) mechanical spray cold cleaner degreaser, identified as PW3, approved for construction in 2010, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing a closed-loop solvent recycling and distillation system, and **controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2** ~~venting indoors~~.

(c) One (1) mechanical spray cold cleaner degreaser, identified as PW4, constructed in 2013, with a projected solvent consumption rate of twelve (12) gallons per day, utilizing closed-loop solvent recycling and distillation system. The volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions from PW4 will be controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(d) One (1) manual cold cleaner degreaser, identified as PW5, constructed in 2013, with a projected solvent consumption rate of forty eight (48) gallon per day and controlled by one (1) catalytic oxidizer incinerator, identified as OXD#2, exhausting through one (1) stack identified as S-OXD2.

(~~c~~**e**) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to [326 IAC 20-6], [326 IAC 8-3-2] and [326IAC 8-3-5].

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

(a) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:

(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 Permittee 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 (b)(1)(A) through (D) of this condition 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.

~~Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaning facility shall comply with the following except when using acetone:~~

~~(a) equip the cleaner with a cover;~~

~~(b) equip the cleaner with a facility for draining cleaned parts;~~

~~(c) close the degreaser cover whenever parts are not being handled in the cleaner;~~

~~(d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;~~

~~(e) provide a permanent, conspicuous label summarizing the operation requirements;~~

~~(f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.~~

D.3.2 **RESERVED** ~~Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

~~The cold cleaner degreasing operations and insignificant degreasing operation are subject to this rule. These degreasing operations shall comply with the following requirements except when using acetone:~~

~~(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:~~

~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:~~

~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF));~~

~~(B) The solvent is agitated; or~~

~~(C) The solvent is heated.~~

~~(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~

~~(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~

~~(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~

~~(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9ºC) (one hundred twenty degrees Fahrenheit (120ºF)):~~

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

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

~~(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S EPA as a SIP revision.~~

~~(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:~~

~~(1) Close the cover whenever articles are not being handled in the degreaser.~~

~~(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~

~~(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

D.3.3 PSD Minor Limit [326 IAC 2-2]

The total VOC usage at PW2 **through PW5** ~~and PW3~~ shall be limited to ~~28.45~~ **174** tons per twelve (12) consecutive month period, with compliance determined at the end of each month. **The minimum overall VOC control efficiency shall be 94.20%.**

Compliance with the above limit in conjunction with Condition **D1.3/D3.3** ~~D.2.3/D.3.3~~ and VOC emissions from natural gas combustion, and the insignificant activities will limit source wide VOC emissions to less than 250 tons per year. Therefore, this is a minor source under 326 IAC 2-2.

Compliance Determination Requirements

D.3.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the solvent manufacturer.

D.3.6 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.3.3, the catalytic oxidizer OXD#2 shall be in operation and control emissions from the part washers at all times when the part washers are in operation.

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after the after the issuance of this permit SSM 143-32975-00007, in order to demonstrate the compliance with Condition D.3.3, the Permittee shall conduct VOC control efficiency (as the product of destruction efficiency and capture efficiency) testing on OXD#2. The testing shall be conducted using methods approved by the Commissioner. The test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.3.8 Catalytic Incinerator Temperature

(a) The Permittee shall determine the 3-hour average catalyst bed inlet and outlet temperatures from the most recent valid stack test that demonstrates compliance with Condition D.3.3, as approved by IDEM.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on OXD#2 for measuring catalyst bed inlet and outlet temperatures. The output of the temperature monitoring system shall be recorded as a 3-hour average. The Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the 3-hour average catalyst bed inlet and outlet temperatures of the thermal oxidizer are below the temperatures determined in the most recent compliance test. A 3-hour average temperature that is below the temperature determined in the most recent compliance test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.~~6~~ **9** Record Keeping Requirements

(a) To document compliance with Conditions D.3.3, the Permittee shall maintain records in accordance with (1) through (~~5~~**6**) below. Records maintained for (1) through (~~5~~**6**) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Conditions D.3.3.

(1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) A log of the dates of use.

(3) The cleanup solvent usage for each month.

(4) The total VOC usage in parts washer PW2 **through PW5** ~~and PW3~~ for each month.

(5) The weight of VOC emitted for each compliance period.

(6) The following operation parameters of catalytic oxidizer:

(A) VOC capture efficiency;

(B) VOC destruction efficiency of the control devices;

(C) A description of the data used to establish the capture and destruction efficiencies; and

(D) Continuous temperature readings.

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

D.3.~~7~~**10** Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.3.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report 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). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

~~A quarterly summary of the information to document compliance with Condition D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

SECTION D.4 FACILITY OPERATION CONDITIONS

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

~~(a) One (1) natural gas fired hot oil boiler identified as TH1 used to heat Press #3, rated at 6 MMBtu per hour and exhausting through one (1) stack identified as S004 [326 IAC 6-2-4].~~

(a) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S005 [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

~~(b) One (1) Offset Gravure Coater station, with a maximum line speed of 1000 feet per minute and a printing width of 42 inches with maximum coverage of 4.74 pounds per million square inches. [326 IAC 8-2-5]~~

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

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

D.4.1 Particulate ~~Matter~~ **Emission Limitations for Sources of Indirect Heating** ~~(PM)~~ [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate ~~Matter~~ Emission Limitations for Sources of Indirect Heating), the PM emissions from the ~~6.0~~ **10** MMBtu per hour heat input boiler shall be limited to 0.6 pounds per MMBtu heat input.

D.4.2 **RESERVED** ~~Volatile Organic Compounds (VOC) [326 IAC 8-2-5]~~

~~Pursuant to 326 IAC 8-2-5 (Surface Coating Emission Limitations: Paper Coating Operations), the Permittee may not cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of two and nine-tenths (2.9) pounds per gallon excluding water, delivered to the Offset Gravure Coater station from a label coating line.~~

Compliance Determination Requirements

D.4.3 **RESERVED** ~~Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]~~

~~Compliance with the VOC content and usage limitations contained in Conditions D.4.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.~~

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

D.4.4 **RESERVED** ~~Record Keeping Requirements~~

~~(a) To document compliance with Conditions D.4.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) 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 Conditions D.4.2.~~

~~(1) The amount and VOC content of each solvent used in the coating applicator of the label coating line. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.~~

~~(2) A log of the dates of use.~~

~~(3) The cleanup solvent usage for each month.~~

~~(4) The weight of VOC emitted for each compliance period.~~

~~(b) Section C – General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.~~

SECTION E.1 FACILITY OPERATION CONDITIONS

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

****

(c) ~~One (1) eight (8) station packaging rotogravure printing press identified as Press #3 (eight stations: P3U1 through P3U8), constructed in April of 1997, with a maximum line speed of 800 ft/min when printing with ink and 700 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P3U1-P3U8 are controlled by one (1) catalytic oxidizing incinerator identified as OXD#2 exhausting through one (1) stack identified as S-OXD2. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #3 (eight stations: P3U1 through P3U8) are considered an existing affected source; and~~

~~(d)~~ One (1) packaging rotogravure printing press, identified as Press # 4, (ten stations: P4U1 through P4U10), constructed in January of 2004, with a maximum line speed of 800 feet per minute (ft/min) and firing natural gas with a total heat input rate of five (5) million (MM) British thermal units (Btu) per hour. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P4U1-P4U10 are controlled by one (1) catalytic oxidizer, identified as OXD#5, then exhausted through one (1) stack identified as S-OXD5. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press # 4, (ten stations: P4U1 through P4U10) are considered an existing affected source.

(d) One (1) ten (10) station packaging rotogravure printing press identified as Press #5 (ten stations: P5U1 through P5U10), constructed in 2013, with a maximum line speed of 1600 ft/min when printing with ink and 1066 ft/min when printing with ink and adhesive. The volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from P5U1-P5U10 are controlled by one (1) natural gas fired regenerative thermal oxidizer identified as OXD#7, to be constructed in 2013, with a maximum design capacity of 14.5 MMBtu/hr, to be constructed in 2013, exhausting through one (1) stack identified as S-OXD7. Under NESHAP Subpart KK the packaging rotogravure printing operations at Press #5 (ten stations: P5U1 through P5U10) are considered a new affected source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [40 CFR 63 ~~326 IAC 2-7-5(1)~~]

.....

SECTION E.2 FACILITY OPERATION CONDITIONS

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

(a) One (1) natural gas fired hot oil boiler identified as TH2 used to heat Press #5, constructed in 2013, rated at 10 MMBtu per hour and exhausting through one (1) stack identified as S004 [40 CFR Part 60, Subpart Dc][326 IAC 6-2-4].

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

New Source Performance Standards (NSPS) Requirements [40 CFR 60]

E.2.1 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60

Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the Boiler, identified as TH2 except as otherwise specified in 40 CFR Part 60, Subpart Dc.

E.2.2 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60 Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units for the Boiler, identified as TH2 as specified as follows:

1. **40 CFR 60.40c(a),(b),(c) and (d)**
2. **40 CFR 60.41c**
3. **40 CFR 60.48c(a),(a)(1), (1)(3), (g) and (i).**

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

Part 70 Quarterly Report

Source Name:	Multi-Color Corporation
Source Address:	2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.:	T143-30351-00007
Facility:	Presses #1**, #2, #4 and #5** ~~–#4~~ emission units P1U1-10, P2U1-9, ~~P3U1-8, and~~ P4U1-10 **and P5U1-10**
Parameter:	Volatile organic compounds (VOC) usage
Limit:	The total input VOC, including coatings, dilution solvents, and cleaning solvents, to Presses #1**, #2, #4 and #5** ~~through #4~~ (emission units P1U1 through P1U10, P2U1 through P2U9, ~~P3U1 through P3U8, and~~ P4U1 through P4U10 **and P5U1 through P5U10**) shall be limited to ~~3,458~~ **3,292** 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			

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

Part 70 Quarterly Report

Source Name:	Multi-Color Corporation
Source Address:	2281 South U.S. 31, Scottsburg, Indiana 47170
Part 70 Permit No.:	T143-30351-00007
Facility:	Parts Washers PW2 ~~and PW3~~ **through PW5**
Parameter:	Volatile organic compounds (VOC) usage
Limit:	The total VOC usage at PW2 ~~and PW3~~ **through PW5** shall be limited to ~~28.45~~ **174** 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			

Other Changes

Upon further review IDEM, OAQ has made the following changes to the Title V permit T143-30351-00007. (deleted language appears as ~~strikout~~ and the new language **bolded**):

Change 1: The emission unit description for the seaming machine has been updated to add an ID to the emission unit.

(a) One (1) high speed seaming machine, **identified as Seam Mach 1,** has a maximum application rate of 31.84 pounds of solvent per 1,000,000 meters of substrate; and a run speed of 500 meters per minute (mpm).

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. 143-32975-00007 and Significant Permit

Modification143-32977-00007. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Josiah Balogun 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) 324-5257 or toll free at 1-800-451-6027 extension 4-5257.

(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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
Emission Summary

Source Name: Multi-Color Corporation
Source Location: 2281 South U.S. 31, Scottsburg, Indiana 47170
Permit Number: SPM 143-32977-00007
Permit Reviewer: Balogun Josiah
Date: 9-May-13

Uncontrolled Potential to Emit

	PM (tons/yr)	PM_{10} (tons/yr)	$PM_{2.5}$ (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHGs as CO2e (tons/yr)	HAPs (tons/yr)
Emission Unit									
Press #5	0	0	0	0	6091.36	0	0	0	2931.71
Part washer PW4	0	0	0	0	14.93	0	0	0	8.49
manual part washer PW5	0	0	0	0	61.02	0	0	0	29.77
Hot Oil Boiler	0.08	0.33	0.33	0.03	0.24	3.68	4.38	5288	0.08
Seaming Mach	0	0	0	0	4.07	0	0	0	0
OXD #7	0.12	0.48	0.48	0.04	0.35	5.33	6.35	7668	0.12
Total Emissions	0.20	0.81	0.81	0.07	6171.97	9.01	10.73	12956.00	Single HAP >10 Combined HAPs > 25

Appendix A: Emissions Calculations
Emission Summary

Source Name: Multi-Color Corporation
Source Location: 2281 South U.S. 31, Scottsburg, Indiana 47170
Permit Number: SPM 143-32977-00007
Permit Reviewer: Balogun Josiah
Date: 9-May-13

Limited Potential to Emit

	PM (tons/yr)	PM_{10} (tons/yr)	$PM_{2.5}$ (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHGs as CO2e (tons/yr)	HAPs (tons/yr)
Emission Unit									
Press #5	0	0	0	0	91.86	0	0	0	38.11
Part washer PW4	0	0	0	0	0.87	0	0	0	0.49
manual part washer PW5	0	0	0	0	3.54	0	0	0	1.73
Hot Oil Boiler	0.08	0.33	0.33	0.03	0.24	3.68	4.38	5288	0.08
Seaming Mach	0	0	0	0	4.07	0	0	0	0
OXD #7	0.12	0.48	0.48	0.04	0.35	5.33	6.35	7668	0.12
Total Emissions	0.20	0.81	0.81	0.07	100.93	9.01	10.73	12956.00	Single HAP >10 Combined HAPs > 25

Emission Calculations

Source Emissions Summary

Multi-Color Corporation

2281 South U.S. 31, Scottsburg, Indiana 47170

	Pre-Modification Potential to Emit of Entire Source per 2011 Renewal							
	PM	PM10	SO_2	NOx	VOC	CO	Total HAPs	CO_2e
Natural Gas	7.80	7.80	0.61	183.05	5.65	86.21	1.97	87,226
OXD # 2, 5 and 6								
Presses #1 through #4					200.54		77.22	
Solvent Degreasing PW2 and PW3					28.45		8.49	
Insignificant Activities					13.77			
TOTAL	**7.8**	**7.8**	**0.6**	**183.1**	**248.4**	**86.2**	**79.2**	
Total PTE of Entire Source	9.39	9.53	0.02	2.58	<250	2.17	>25	
Title V Major Source Thresholds	N/A	100	100	100	100	100	25	100,000
PSD Major Source Thresholds	250	250	250	250	250	250	N/A	100,000

	CORRECTED* Pre-Modification Potential to Emit of Entire Source							
	PM	PM10	SO_2	NOx	VOC	CO	Total HAPs	CO_2e
Natural Gas	0.38	1.51	0.12	19.85	1.09	16.67	0.37	23,965
OXD # 2, 5 and 6								
Presses #1 through #4					200.54		77.22	
Solvent Degreasing PW2 and PW3					28.45		8.49	
Insignificant Activities					8.41			
TOTAL	**0.38**	**1.51**	**0.12**	**19.85**	**238.49**	**16.67**	**86.08**	**23,965**
Total PTE of Entire Source					<250		>25	
Title V Major Source Thresholds	N/A	100	100	100	100	100	25	100,000
PSD Major Source Thresholds	250	250	250	250	250	250	N/A	100,000

* Includes corrections to rating of OXD #6 and HAPs from PW3 which were omitted previously.

	Uncontrolled/Unlimited Potential to Emit Being Added/Removed							
	PM	PM10	SO_2	NOx	VOC	CO	Total HAPs	CO_2e
Existing Press #3 Boiler	-0.05	-0.20	-0.02	-2.63	-0.14	-2.21	-0.05	-3,173
Press #5 Boiler/OXD #7 (new)	0.20	0.82	0.06	10.73	0.59	9.01	0.20	12,956
Natural Gas Subtotal	**0.15**	**0.62**	**0.05**	**8.10**	**0.45**	**6.81**	**0.15**	**9,783**
Press #3 (removed)					-1779.76		-717.46	
New Press #5					6091.36		2931.71	
Press Subtotal					**4311.60**		**2214.25**	
Existing Parts Washer (PW2 to OXD2)					-79.49		0.00	
Existing Parts Washer (PW3 to OXD2)					-14.33		-8.15	
New Parts Washer (PW4 to OXD2)					14.93		8.49	
Manual Parts Washer (new)					61.02		29.77	
Parts Washer Subtotal					**-17.87**		**30.11**	
Seaming Machine (removed)					-1.14		0.00	
Seaming Machine (new)					4.07		0.00	
Seaming Machine Subtotal					**2.93**		0.00	
TOTAL	**0.15**	**0.62**	**0.05**	**8.10**	**4329.91**	**6.81**	**2214.40**	**9,783**

	Post-Modification Potential to Emit of Entire Source							
	PM	PM10	SO_2	NOx	VOC	CO	Total HAPs	CO_2e
Natural Gas	0.53	2.12	0.17	27.95	1.54	23.48	0.53	33,748
OXD # 2, 5, 6 and 7 (new)							0.12	
Presses #1, 2, 4 and 5 (new)					190.95		79.22	
Degreasing (PW2+PW3+PW4+Manual)					9.65		2.71	
Insignificant Activities					11.20		0.00	
TOTAL	**0.53**	**2.12**	**0.17**	**27.95**	**213.33**	**23.48**	**82.58**	**33,748**
Title V Major Source Thresholds	N/A	100	100	100	100	100	25	100,000
PSD Major Source Thresholds	250	250	250	250	250	250	N/A	100,000

Multi-Color Corporation
2281 South U.S. 31, Scottsburg, Indiana 47170

Source	Number of Units	MMBtu/hr Rating	Annual Hours of Operation	Annual Natural Gas (mmcf/yr)	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	SO_2 ton/yr	NOx ton/yr	CO ton/yr	VOC ton/yr	Benzene ton/yr	Dichloro-benzene ton/yr	Formalde hyde ton/yr	Hexane ton/yr	Toluene ton/yr	Cadmium ton/yr	Chromium ton/yr	Nickel ton/yr	Total HAP ton/yr	Single HAP ton/yr
Press# 5 Boiler	1	10	8760	87.60	0.08	0.33	0.33	0.03	4.38	3.68	0.24	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.08	0.08
Oxidizer# 7	1	14.5	8760	127.02	0.12	0.48	0.48	0.04	6.35	5.33	0.35	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.12	0.11
Combustion Totals, Tons/Year					0.20	0.82	0.82	0.06	10.73	9.01	0.59	0.00	0.00	0.01	0.19	0.00	0.00	0.00	0.00	0.20	0.19

Note: Assume that the heating value of natural gas is 1000 Btu / Cubic Foot.

	Natural Gas Emission Factors		
	Rated Capacity, MMBtu/hr		
	0 - 0.3	0.3 - 100	> 100
Units	lb/mmcf		
PM	1.90	1.90	1.90
PM10	7.60	7.60	7.60
PM2.5	7.60	7.60	7.60
SO_2	0.60	0.60	0.60
NOx	94.00	100.00	190.00
CO	40.00	84.00	84.00
VOC	5.50	5.50	5.50
Source	AP-42, Chapter 1.4		

HAPs	Natural Gas Emission Factors in lb/MMcf
Benzene	0.0021
Dichlorobenzene	0.0012
Formaldehyde	0.075
Hexane	1.8
Toluene	0.0034
Cadmium	0.0011
Chromium	0.0014
Nickel	0.0021
Source	AP-42, Chapter 1.4

Sample Calculation	MMCF / YR	x	LB / MMCF	x	TONS / LB	=	TONS / YR

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr			
Press #5 Boiler	5,256	0.10	0.10
Oxidizer #7	7,621	0.15	0.14
Summed Potential Emissions in tons/yr			
Press #5 Boiler	5,256		
Oxidizer #7	7,621		
CO2e Total in tons/yr			
Press #5 Boiler	5,288		
Oxidizer #7	7,668		

Multi-Color Corporation
2281 South U.S. 31, Scottsburg, Indiana 47170

Source	Number of Units	MMBtu/hr Rating	Annual Hours of Operation	Annual Natural Gas (mmcf/yr)	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	SO_2 ton/yr	NOx ton/yr	CO ton/yr	VOC ton/yr	Benzene ton/yr	Dichloro-benzene ton/yr	Formaldehyde ton/yr	Hexane ton/yr	Toluene ton/yr	Cadmium ton/yr	Chromium ton/yr	Nickel ton/yr	Total HAP ton/yr	Single HAP ton/yr
Press #1 Dryer	1	7.76	8760	67.98	0.06	0.26	0.26	0.02	3.40	2.86	0.19	7.14E-05	4.08E-05	2.55E-03	6.12E-02	1.16E-04	3.74E-05	4.76E-05	7.14E-05	6.41E-02	6.12E-02
Press #2 Dryer	1	7.76	8760	67.98	0.06	0.26	0.26	0.02	3.40	2.86	0.19	7.14E-05	4.08E-05	2.55E-03	6.12E-02	1.16E-04	3.74E-05	4.76E-05	7.14E-05	6.41E-02	6.12E-02
Press #3 Boiler	1	6	8760	52.56	0.05	0.20	0.20	0.02	2.63	2.21	0.14	5.52E-05	3.15E-05	1.97E-03	4.73E-02	8.94E-05	2.89E-05	3.68E-05	5.52E-05	4.96E-02	4.73E-02
Press #4 Dryer	1	5	8760	43.80	0.04	0.17	0.17	0.01	2.19	1.84	0.12	4.60E-05	2.63E-05	1.64E-03	3.94E-02	7.45E-05	2.41E-05	3.07E-05	4.60E-05	4.13E-02	3.94E-02
OXD #2	1	4	8760	35.04	0.03	0.13	0.13	0.01	1.75	1.47	0.10	3.68E-05	2.10E-05	1.31E-03	3.15E-02	5.96E-05	1.93E-05	2.45E-05	3.68E-05	3.30E-02	3.15E-02
OXD #5	1	5.8	8760	50.81	0.05	0.19	0.19	0.02	2.54	2.13	0.14	5.33E-05	3.05E-05	1.91E-03	4.57E-02	8.64E-05	2.79E-05	3.56E-05	5.33E-05	4.79E-02	4.57E-02
OXD #6	1	9	8760	78.84	0.07	0.30	0.30	0.02	3.94	3.31	0.22	8.28E-05	4.73E-05	2.96E-03	7.10E-02	1.34E-04	4.34E-05	5.52E-05	8.28E-05	7.44E-02	7.10E-02
Combustion Totals, Tons/Year					0.38	1.51	1.51	0.12	19.85	16.67	1.09	0.00	0.00	0.01	0.36	0.00	0.00	0.00	0.00	0.37	0.36

Note: Assume that the heating value of natural gas is 1000 Btu / Cubic Foot.

	Natural Gas Emission Factors		
	Rated Capacity, MMBtu/hr		
	0 - 0.3	0.3 - 100	> 100
Units	lb/mmcf		
PM	1.90	1.90	1.90
PM10	7.60	7.60	7.60
PM2.5	7.60	7.60	7.60
SO_2	0.60	0.60	0.60
NOx	94.00	100.00	190.00
CO	40.00	84.00	84.00
VOC	5.50	5.50	5.50
Source	AP-42, Chapter 1.4		

HAPs	Natural Gas Emission Factors in lb/MMcf
Benzene	0.0021
Dichlorobenzene	0.0012
Formaldehyde	0.075
Hexane	1.8
Toluene	0.0034
Cadmium	0.0011
Chromium	0.0014
Nickel	0.0021
Source	AP-42, Chapter 1.4

Sample Calculation	MMCF / YR	x	LB / MMCF	x	TONS / LB	=	TONS / YR

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	23,820	0.46	0.44
Summed Potential Emissions in tons/yr	23,821		
CO2e Total in tons/yr	23,965		

Emissions Calculations
Seaming Machines
Multi-Color Corporation
2281 South U.S. 31, Scottsburg, Indiana 47170

Unit	meter/minute	lbs/1,000,000 meter	lbs/mins	lbs/day	tons of VOC/year
Seaming Mach. (140 mpm) - Removed	140	31	-0.00434	-6.25	-1.14
Seaming Mach. (500 mpm) - Existing	500	31	0.01550	22.32	4.07
Seaming Mach. (500 mpm) - new	500	31	0.01550	22.32	4.07
				Total difference from permit	**7.01**

Maximum Application Rate is 31 lb/1,000,000 meters

Emission Calculations

VOC Emission Calculations

New Degreasing Operations

Multi-Color Corporation

2281 South U.S. 31, Scottsburg, Indiana 47170

Degreasing Operations	Solvent Used	Solvent Density (lbs/gal)	Maximum Usage (gal/yr)	Maximum Usage (lbs/yr)	Weight % VOC	Weight % HAP	VOC Emissions (tons/yr)	HAP Emissions (tons/yr)	Control Equipment ID	Overall Control Efficiency	Controlled VOC (tons/yr)	Controlled HAP (tons/yr)
PW2 (existing)	Acetone	6.59	22905	150944	100.00%	0.00%	75.47	0.00	OXD2	94.20%	4.38	0.00
PW3 (existing)	MEK	6.7	1922.4	12880	100.00%	0.00%	6.44	0.00	OXD2	94.20%	0.37	0.00
PW3 (existing)	Toluene	7.23	2349.6	16988	100.00%	100.00%	8.49	8.49	OXD2	94.20%	0.49	0.49
PW4 (new)	MEK	6.7	1922.4	12880	100.00%	0.00%	6.44	0.00	OXD2	94.20%	0.37	0.00
PW4 (new)	Toluene	7.23	2349.6	16988	100.00%	100.00%	8.49	8.49	OXD2	94.20%	0.49	0.49
Manual Parts Washer	MEK	6.7	4380	29346	100.00%	0.00%	14.67	0.00	OXD2	94.20%	0.85	0.00
Manual Parts Washer	Toluene	7.23	8234.4	59535	100.00%	100.00%	29.77	29.77	OXD2	94.20%	1.73	1.73
Manual Parts Washer	Isapropanol	6.56	3854.4	25285	100.00%	0.00%	12.64	0.00	OXD2	94.20%	0.73	0.00
Manual Parts Washer	Ethyl Acetate	7.49	1051.2	7873	100.00%	0.00%	3.94	0.00	OXD2	94.20%	0.23	0.00
						Total Potential Emissions (tons/yr)	**166.36**	**46.75**			**9.65**	**2.71**

Manual parts washer uses 50% toluene/MEK blend (50/50) and 50% toluene/IPA/ethyl acetate blend (44/44/12)

METHODOLOGY

VOC Emissions (tpy) = Material Usage (lbs/yr) * Weight % VOC * 1 ton/2000 lbs

HAP Emissions (tpy) = Material Usage (lbs/yr) * Weight % HAP * 1 ton/2000 lbs

Press# 5: Coca-Cola Labels

Throughput for Packaging Rotogravure Printing Press

Press I.D.	Max.Line Speed (ft/min)	Convert Feet to Inches	Maximum Print Width (in)	60 Min/Hour	8,760 HR YEAR	1/1,000,000	Potential MMin²/Year
New Press #5	1,066	12	31.7	60	8,760	1,000,000	213,134

PRINTING VOC:

Unit No.	Ink Name	Maximum Coating Coverage lbs/MMin²	Flash Off %	Potential Throughput MMin²/Year	lbs/ton	Potential VOC Pounds per Hour	Potential VOC Emissions Tons per Year	Control Equipment ID	Overall Control Efficiency	Controlled VOC Pounds per Hour	Controlled VOC Tons per Year	VOC Input Limit as % of potential input	Limited/Controlled VOC Tons per Year	Total Limited VOC input Tons per Year
1	Varnish	12.09	100%	213,134	2,000	243.52	1066.61	OXD# 7 (new)	94.20%	14.12	61.86	29.44%	18.21	314.01
2	Black	3.16	100%	213,134	2,000	62.89	275.47	OXD# 7 (new)	94.20%	3.65	15.98	29.44%	4.70	81.10
3	360 Red	16.52	100%	213,134	2,000	317.60	1391.11	OXD# 7 (new)	94.20%	18.42	80.68	29.44%	23.75	409.54
4	White	13.23	100%	213,134	2,000	223.44	978.67	OXD# 7 (new)	94.20%	12.96	56.76	29.44%	16.71	288.12
5	White	13.23	100%	213,134	2,000	223.44	978.67	OXD# 7 (new)	94.20%	12.96	56.76	29.44%	16.71	288.12
6	Adhesive	15.70	100%	213,134	2,000	319.83	1400.85	OXD# 7 (new)	94.20%	18.55	81.25	29.44%	23.92	412.41
Total Potential Emissions: Coca Cola						**1,390.72**	**6,091.36**			**80.66**	**353.30**		**104.01**	**1793.30**

Notes:

All calculations based upon highest VOC content labels printed at facility

Maximum speed for applying designated adhesive used for each press

Heatset offset printing has an assumed flash off of 80%. Other types of printers have a flash off of 100%

There are negligible emissions from clean-up operations.

Methodology:

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8,760 hours per year = MMin² per Year

VOC = Maximum Coverage pounds per MMin² * Weight percentage organics (volatiles minus water) * Flash off * Throughput * Tons per 2,000 pounds = Tons per Year

Controlled/Limited Emissions = Uncontrolled Emissions * (1 - (Overall Control Efficiency)) * VOC Input Limitation (%)

Source	Number of Units	MMBtu/hr Rating	Annual Hours of Operation	Annual Natural Gas (mmcf/yr)	PM	PM10	PM2.5	SO_2	NOx	CO	VOC	Benzene	Dichloro-benzene	Formaldehyde	Hexane	Toluene	Cadmium	Chromium	Nickel	Total HAP	Single HAP
					ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr
Press #1 Dryer	1	7.76	8760	67.98	0.06	0.26	0.26	0.02	3.40	2.86	0.19	7.14E-05	4.08E-05	2.55E-03	6.12E-02	1.16E-04	3.74E-05	4.76E-05	7.14E-05	6.41E-02	6.12E-02
Press #2 Dryer	1	7.76	8760	67.98	0.06	0.26	0.26	0.02	3.40	2.86	0.19	7.14E-05	4.08E-05	2.55E-03	6.12E-02	1.16E-04	3.74E-05	4.76E-05	7.14E-05	6.41E-02	6.12E-02
Press #4 Dryer	1	5	8760	43.80	0.04	0.17	0.17	0.01	2.19	1.84	0.12	4.60E-05	2.63E-05	1.64E-03	3.94E-02	7.45E-05	2.41E-05	3.07E-05	4.60E-05	4.13E-02	3.94E-02
Press# 5 Boiler	1	10	8760	87.60	0.08	0.33	0.33	0.03	4.38	3.68	0.24	9.20E-05	5.26E-05	3.29E-03	7.88E-02	1.49E-04	4.82E-05	6.13E-05	9.20E-05	8.26E-02	7.88E-02
Actual @ 95%					**0.24**	**0.97**	**0.97**	**0.08**	**12.70**	**10.67**	**0.70**	**0.00**	**0.00**	**0.01**	**0.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.23**
OXD #2	1	4	8760	35.04	0.03	0.13	0.13	0.01	1.75	1.47	0.10	3.68E-05	2.10E-05	1.31E-03	3.15E-02	5.96E-05	1.93E-05	2.45E-05	3.68E-05	3.30E-02	3.15E-02
OXD #5	1	5.8	8760	50.81	0.05	0.19	0.19	0.02	2.54	2.13	0.14	5.33E-05	3.05E-05	1.91E-03	4.57E-02	8.64E-05	2.79E-05	3.56E-05	5.33E-05	4.79E-02	4.57E-02
OXD #6	1	9	8760	78.84	0.07	0.30	0.30	0.02	3.94	3.31	0.22	8.28E-05	4.73E-05	2.96E-03	7.10E-02	1.34E-04	4.34E-05	5.52E-05	8.28E-05	7.44E-02	7.10E-02
OXD #7	1	14.5	8760	127.02	0.12	0.48	0.48	0.04	6.35	5.33	0.35	1.33E-04	7.62E-05	4.76E-03	1.14E-01	2.16E-04	6.99E-05	8.89E-05	1.33E-04	1.20E-01	1.14E-01
Actual @ 55%					**0.15**	**0.61**	**0.61**	**0.05**	**8.02**	**6.74**	**0.44**	**0.00**	**0.00**	**0.01**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.15**	**0.14**
	Actual Combustion Totals, Tons/Year				**0.39**	**1.57**	**1.57**	**0.12**	**20.72**	**17.41**	**1.14**	**0.00**	**0.00**	**0.02**	**0.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.39**	**0.37**

Note: Assume that the heating value of natural gas is 1000 Btu / Cubic Foot.

	Natural Gas Emission Factors		
	Rated Capacity, MMBtu/hr		
	0 - 0.3	0.3 - 100	> 100
Units	lb/mmcf		
PM	1.90	1.90	1.90
PM10	7.60	7.60	7.60
PM2.5	7.60	7.60	7.60
SO_2	0.60	0.60	0.60
NOx	94.00	100.00	190.00
CO	40.00	84.00	84.00
VOC	5.50	5.50	5.50
Source	AP-42, Chapter 1.4		

HAPs	Natural Gas Emission Factors in lb/MMcf
Benzene	0.0021
Dichlorobenzene	0.0012
Formaldehyde	0.075
Hexane	1.8
Toluene	0.0034
Cadmium	0.0011
Chromium	0.0014
Nickel	0.0021
Source	AP-42, Chapter 1.4

Total Actual VOCs for Source			
Units	Uncontrolled VOCs TPY	Controlled VOCs TPY	Limited/Cont. VOCs TPY
Presses @ 95%	6965.19	403.94	105.02
Oxidizers @ 55%	0.44	0.44	0.44
Mech. Parts Washers @ 62.5%	65.84	3.82	3.82
Manual Parts Washer @ 100%	61.02	9.65	9.65
Seaming Mach. @ 89%	7.25	7.25	7.25
Insig. Activities @ 100%	3.06	3.06	3.06
Total Actual VOCs	**7102.80**	**428.16**	**129.24**

Emissions Calculations

Insignificant Activities

Multi-Color Corporation

2281 South U.S. 31, Scottsburg, Indiana 47170

Source	PM/PM10 ton/yr	SO2 ton/yr	NOx ton/yr	CO ton/yr	VOC ton/yr
~~Press # 3 Boiler~~	~~0.20~~	~~0.02~~	~~2.63~~	~~2.21~~	~~0.14~~
Isopropyl acetate Storage Tanks	-	-	-	-	0.14
Ink dispensing system	-	-	-	-	2.00
Degreasing Operation	-	-	-	-	0.92
~~Electron Beam Curing Unit~~	-	-	-	-	~~6.28~~
~~Seaming Machine (140 mpm)~~	-	-	-	-	~~-1.14~~
Ex. Seaming Machine (500 mpm)	-	-	-	-	4.07
New Seaming Machine (500 mpm)	-	-	-	-	4.07
Total	**0.00**	**0.00**	**0.00**	**0.00**	**11.20**

Emission Calculations

New Emission Unit Totals

Multi-Color Corporation

2281 South U.S. 31, Scottsburg, Indiana 47170

Uncontrolled Potential Emissions for Modification (tons/year)

	Emissions Generating Activity					
Pollutant	Boiler (new)	OXD#7 (new)	Press #5 (new)	Parts Washer 4 (new)	Manual Parts Washer (new)	**TOTAL**
PM	0.08	0.12	-	-		0.2
PM10	0.33	0.48	-	-		0.8
PM2.5	0.33	0.48	-	-		0.8
SO_2	0.03	0.04	-	-		0.1
NOx	4.38	6.35	-	-		10.7
VOC	0.24	0.35	6,091.36	14.93	61.02	6,167.9
CO	3.68	5.33	-	-		9.0
CO_2e	5,288	7,668	-	-		12,956
Total HAP	0.08	0.12	2,931.71	8.49	29.77	2,970.2
Single HAP	0.08	0.11	2,931.71	8.49	29.77	2,970.2

Controlled Potential Emissions for Modification (tons/year)

	Emissions Generating Activity					
Pollutant	Natural Gas Combustion	OXD#7 (new)	Press #5 (new)	Parts Washer 4 (new)	Manual Parts Washer (new)	**TOTAL**
PM	0.08	0.12	-	-		0.2
PM10	0.33	0.48	-	-		0.8
PM2.5	0.33	0.48	-	-		0.8
SO_2	0.03	0.04	-	-		0.1
NOx	4.38	6.35	-	-		10.7
VOC	0.24	0.35	353.30	0.87	3.54	358.3
CO	3.68	5.33	-	-		9.0
CO_2e	5,288	7,668	-	-		12,956
Total HAP	0.08	0.12	146.59	0.49	1.73	149.0
Single HAP	0.08	0.11	146.59	0.49	1.73	149.0

Controlled/Limited Potential Emissions for Modification (tons/year)

	Emissions Generating Activity					
Pollutant	Natural Gas Combustion	OXD#7 (new)	Press #5 (new)	Parts Washer 4 (new)	Manual Parts Washer (new)	**TOTAL**
PM	0.08	0.12	-	-		0.20
PM10	0.33	0.48	-	-		0.82
PM2.5	0.33	0.48	-	-		0.82
SO_2	0.03	0.04	-	-		0.06
NOx	4.38	6.35	-	-		10.73
VOC	0.24	0.35	91.86	0.87	3.54	96.85
CO	3.68	5.33	-	-		9.01
CO_2e	5,288	7,668	-	-		12955.57
Total HAP	0.08	0.12	38.11	0.49	1.73	40.53
Single HAP	0.08	0.11	38.11	0.49	1.73	40.52

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Aron Kratky
Multi-Color Corporation
2281 S US 31
Scottsburg, Indiana 47170

DATE: July 15, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V – Significant Permit Modification
143-32977-00007

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:
Darin Brown, Plant Manager / Multi-Color Corporation
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.

Final Applicant Cover letter.dot 6/13/2013

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

July 15, 2013

TO: Scott 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: Multi-Color Corporation
Permit Number: 143-32977-00007

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 7/15/2013 Multi-Color Corporation 143-32977-00007 Final			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Aron Kratky Multi-Color Corporation 2281 S US 31 Scottsburg IN 47170 (Source CAATS) confirmed delivery									
2		Darin Brown Plant Mgr Multi-Color Corporation 2281 S US 31 Scottsburg IN 47170 *(RO CAATS)*									
3		Scott County Health Department 1471 N. Gardner St Scottsburg IN 47170-7751 *(Health Department)*									
4		Scottsburg City Council and Mayors Office 2 E. McLain Street Scottsburg IN 47170 *(Local Official)*									
5		Scott Co Public Library 108 S Main St Scottsburg IN 47170-1892 *(Library)*									
6		Scott County Commissioners 1 E. McClain Ave., County Courthouse Scottsburg IN 47170 *(Local Official)*									
7		Jim Binkley Scottsburg Electric Department 2162 South US 31 Scottsburg IN 47170 *(Affected Party)*									
8		Resident 2129 South US 31 Scottsburg IN 47170 *(Affected Party)*									
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
7			

FACSIMILIE OF PS Form 3877