



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 11, 2012

RE: Product Specialties Inc. / 043 - 32326 - 00039

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.dot12/03/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Sandra Vargas
Product Specialties, Inc.
2073 McDonald Avenue
New Albany, Indiana 47150

December 11, 2012

Re: 043-32326-00039
Second Significant Revision to
F043-24598-00039

Dear Ms. Vargas:

Product Specialties Inc. was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F043-24598-00039 on May 27, 2008 for a stationary vinyl wall covering manufacturing source located at 2073 McDonald Avenue, New Albany, Indiana. On September 18, 2012 the Office of Air Quality (OAQ) received an application from the source requesting permission for the installation and operation of a new rotogravure press, identified as Machine 7 Printer (Nakajima) (EU-19), and laminator, identified as Machine 7 Laminator (Nakajima) (EU-20). Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

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

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

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 Ryan Graunke, of my staff, at 317-234-5374 or 1-800-451-6027, and ask for extension 4-5374.

Sincerely,



Iryn Calilung Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/REG

cc: File - Floyd County
Floyd County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Product Specialties, Inc.
2073 McDonald Avenue
New Albany, Indiana 47150**

(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. 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 2-8 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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

Operation Permit No.: F043-24598-00039	
Issued by: <i>Original document signed by:</i> Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 27, 2008 Expiration Date: May 27, 2018
First Significant Permit Revision No.: 043-26715-00039, issued November 6, 2008 First Administrative Amendment No.: 043-31212-0039, issued January 3, 2012 Second Administrative Amendment No.: 043-32207-0039, issued September 04, 2012	
Second Significant Permit Revision No.: 043-32326-00039	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 11, 2012 Expiration Date: May 27, 2018

TABLE OF CONTENTS

A. SOURCE SUMMARY	4
A.1 General Information [326 IAC 2-8-3(b)]	
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	
A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(l)]	
A.4 FESOP Applicability [326 IAC 2-8-2]	
B. GENERAL CONDITIONS	7
B.1 Definitions [326 IAC 2-8-1]	
B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability [326 IAC 2-8-6][IC 13-17-12]	
B.5 Severability [326 IAC 2-8-4(4)]	
B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]	
B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]	
B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]	
B.12 Emergency Provisions [326 IAC 2-8-12]	
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]	
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]	
B.16 Permit Renewal [326 IAC 2-8-3(h)]	
B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]	
B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]	
B.19 Source Modification Requirement [326 IAC 2-8-11.1]	
B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]	
B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]	
B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16] [326 IAC 2-1.1-7]	
B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	16
Emission Limitations and Standards [326 IAC 2-8-4(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 Overall Source Limit [326 IAC 2-8]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-8-4(3)]	
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 2-8-4][326 IAC 2-8-5(a)(1)]	
C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]	
C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]	
Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]	
C.12 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]	

- C.13 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test
[326 IAC 2-8-4][326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

Stratospheric Ozone Protection

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

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 23

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Particulate Matter [326 IAC 6-3-2]
- D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.1.3 Volatile Organic Compounds (VOC) [326 IAC 2-8]
- D.1.4 Hazardous Air Pollutants (HAPs) [326 IAC 2-8]
- D.1.5 Volatile Organic Compounds [326 IAC 8-1-6]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.7 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)
- D.1.8 Particulate Control [326 IAC 2-8-5(a)(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

- D.1.9 Visible Emissions Notations
- D.1.10 Parametric Monitoring
- D.1.11 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- D.1.12 Record Keeping Requirement
- D.1.13 Reporting Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 29

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]
- D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.3 Volatile Organic Compounds [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS 33

New Source Performance Standards (NSPS) Requirements [326 IAC 12]

- E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]
- E.1.2 Standards of Performance for Flexible Vinyl and Urethane Coating and Printing [40 CFR Part 60, Subpart FFF][326 IAC 12]

Certification Form 35

Emergency Occurrence Form..... 36

Quarterly Report Form..... 38

Quarterly Deviation and Compliance Monitoring Report Form..... 44

Attachment A [NSPS Subpart JJJ, Standards Standards for Vinyl and Urethane Coating and Printing]

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 2-8-3(b)]

The Permittee owns and operates a stationary vinyl wall covering manufacturing operation.

Source Address:	2073 McDonald Avenue, New Albany, Indiana 47150
General Source Phone Number:	(812) 945-0920
SIC Code:	3081 (Unsupported Plastics Film and Sheet)
County Location:	Floyd
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) PVC resin powder storage silo, identified as EU-01, with a maximum storage capacity of 78.8 tons, using a baghouse for particulate matter control, and exhausting to stack V1;
- (b) One (1) calcium carbonate (CaCO₃) storage silo, identified as EU-02, with a maximum storage capacity of 61 tons, using a baghouse for particulate matter control, and exhausting to stack V2;
- (c) One (1) plastic film mixing line, identified as EU-05, with a maximum capacity of 1588 pounds per hour, using baghouses for particulate matter control, exhausting to stack V3;
- (d) Two (2) extrusion units, identified as Extruder #1 (EU-06) and Extruder #2 (EU-07), each having a maximum throughput of 1,020 pounds per hour, exhausting to stacks S4 and S5, respectively;
- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as Machine 1 Printer (Tinter/Washcoater) (EU-09), with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as Machine 2 Printer (Profama) (EU-11), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as Machine 3 Printer (Magnat) (EU-13), with a maximum coverage of 14.4 pounds of ink per million in² of PVC sheet vinyl per head (lb/million in²/head), exhausting to stack S12 and S13;

- (h) One (1) rotogravure press with six (6) color printing heads, identified as Machine 4 Printer (W&H3) (EU-15), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S15;
- (i) One (1) rotogravure press with four (4) color printing heads, identified as Machine 6 Printer (W&H6) (EU-17), installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S18;
- (j) One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;
- (k) One (1) laminator, identified as Machine 2 Laminator (Profama) (EU-12), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S8;
- (l) One (1) laminator, identified as Machine 3 Laminator (Magnat) (EU-14), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S14;
- (m) One (1) laminator, identified as Machine 4 Laminator (W&H3) (EU-16), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack-S16;
- (n) One (1) laminator, identified as Machine 6 Laminator (W&H6) (EU-18), installed in 2008, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S20; and
- (o) One (1) laminator, identified as Machine 7 Laminator (Nakajima) (EU-20), approved for construction in 2012, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S25.

Pursuant to 40 CFR 60, Subpart FFF, the emission units EU-09, EU-11, EU-15, EU-17, and EU-19 above are considered affected facilities.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with the heat input equal to or less than ten (10) million Btu per hour:
 - (1) One (1) natural gas-fired boiler rated at 2.7 MMBtu/hr [326 IAC 6-2-4];
 - (2) One (1) natural gas-fired space heater rated at 0.58 MMBtu/hr;
 - (3) Eight (8) natural gas-fired space heaters rated at 0.09 MMBtu/hr each;
 - (4) Six (6) natural gas-fired space heaters rated at 0.1 MMBtu/hr each;
 - (5) Two (2) natural gas-fired space heaters rated at 0.12 MMBtu/hr each;
 - (6) One (1) natural gas-fired space heater rated at 0.83 MMBtu/hr;
 - (7) One (1) natural gas-fired space heater rated at 0.12 MMBtu/hr;
 - (8) Two (2) natural gas-fired ovens for Machine 1 Printer (Tinter/Washcoater) (EU-09) each rated at 0.4 MMBtu/hr;

- (9) Four (4) natural gas-fired ovens for Machine 2 Printer (Profama) (EU-11) each rate at 0.75 MMBtu/hr;
 - (10) One (1) natural gas-fired oven for Machine 4 Printer (W&H3) (EU-15) rated at 3.00 MMBtu/hr; and
 - (11) Four (4) natural gas-fired ovens for Machine 6 Printer (W&H6) (EU-17), each rated at 0.75 MMBtu/hr.
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts [326 IAC 8-3-2] [326 IAC 8-3-5][326 IAC 8-3-8];
 - (c) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
 - (d) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
 - (e) Closed loop heating and cooling systems;
 - (f) Natural draft cooling towers not regulated under a NESHAP;
 - (g) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
 - (h) Paved and unpaved roads and parking lots with public access [326 IAC 6-4];
 - (i) Blow down for sight glass, boiler, compressors, pumps, and cooling towers.
 - (j) Emission units whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):
 - (1) Three (3) granulators that chop waste film and recirculate to the mixing line; and
 - (2) One (1) plastisol mixing line.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

-
- (a) This permit, F043-24598-00039, is issued for a fixed term of ten (10) 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, 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 2-8-6][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 2-8-4(4)]

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 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:
- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (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 April 15 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

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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.12 Emergency Provisions [326 IAC 2-8-12]

- (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 except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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 Southwest 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
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) 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.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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

- (a) All terms and conditions of permits established prior to F043-24598-00039 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
- (2) revised, or
- (3) deleted.

- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) 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 approval required by 326 IAC 2-8-11.1 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 2-8-15 b(1) and (c). 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 2-8-15 b(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)]
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 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) 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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)] 326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) 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.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 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.4 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.5 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.6 Fugitive Dust Emissions [326 IAC 6-4]

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

C.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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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.

Testing Requirements [326 IAC 2-8-4(3)]

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4][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.13 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]

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.
- (d) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
 - (AA) All calibration and maintenance records.

- (BB) All original strip chart recordings for continuous monitoring instruments.
 - (CC) Copies of all reports required by the FESOP.
- Records of required monitoring information include the following:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
 - (BB) The dates analyses were performed.
 - (CC) The company or entity that performed the analyses.
 - (DD) The analytical techniques or methods used.
 - (EE) The results of such analyses.
 - (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.17 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Vinyl Wall Covering Manufacturing Operation

- (a) One (1) PVC resin powder storage silo, identified as EU-01, with a maximum storage capacity of 78.8 tons, using a baghouse for particulate matter control, and exhausting to stack V1;
- (b) One (1) calcium carbonate (CaCO_3) storage silo, identified as EU-02, with a maximum storage capacity of 61 tons, using a baghouse for particulate matter control, and exhausting to stack V2;
- (c) One (1) plastic film mixing line, identified as EU-05, with a maximum capacity of 1588 pounds per hour, using baghouses for particulate matter control, exhausting to stack V3;
- (d) Two (2) extrusion units, identified as Extruder #1 (EU-06) and Extruder #2 (EU-07), each having a maximum throughput of 1,020 pounds per hour, exhausting to stacks S4 and S5, respectively;
- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as Machine 1 Printer (Tinter/Washcoater) (EU-09), with a maximum coverage of 15 pounds of ink per million square inches ($\text{lb}/\text{million in}^2$) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as Machine 2 Printer (Profama) (EU-11), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head ($\text{lb}/\text{million in}^2/\text{head}$), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as Machine 3 Printer (Magnat) (EU-13), with a maximum coverage of 14.4 pounds of ink per million in^2 of PVC sheet vinyl per head ($\text{lb}/\text{million in}^2/\text{head}$), exhausting to stack S12 and S13;
- (h) One (1) rotogravure press with six (6) color printing heads, identified as Machine 4 Printer (W&H3) (EU-15), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head ($\text{lb}/\text{million in}^2/\text{head}$), exhausting to stack S15;
- (i) One (1) rotogravure press with four (4) color printing heads, identified as Machine 6 Printer (W&H6) (EU-17), installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head ($\text{lb}/\text{million in}^2/\text{head}$), exhausting to stack S18;
- (j) One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;
- (k) One (1) laminator, identified as Machine 2 Laminator (Profama) (EU-12), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S8;
- (l) One (1) laminator, identified as Machine 3 Laminator (Magnat) (EU-14), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S14;
- (m) One (1) laminator, identified as Machine 4 Laminator (W&H3) (EU-16), with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack-S16;

- (n) One (1) laminator, identified as Machine 6 Laminator (W&H6) (EU-18), installed in 2008, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S20; and
- (o) One (1) laminator, identified as Machine 7 Laminator (Nakajima) (EU-20), approved for construction in 2012, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S25.

Pursuant to 40 CFR 60, Subpart FFF, the emission units EU-09, EU-11, EU-15, EU-17, and EU-19 above are considered affected facilities.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter [326 IAC 6-3-2]]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the storage silos (EU-01 & EU-02), the mixing operation (EU-05), the extrusion units (EU-06 & EU-07), and the laminating lines (EU-14, EU-12, EU-16, EU-18 and EU-20) shall not exceed the following allowable PM emissions when operating at a process weight rate as shown in the table below:

Process Facility	Stack ID	Process Throughput (tons/hr)	Allowable PM Emissions (lbs/hr)
Resin Powder Storage Silo (EU-01)	V1	0.44	2.37
CaCO ₃ Storage Silo (EU-02)	V2	0.29	1.79
Plastic Film Mixing Line (EU-05)	V3	0.794	3.52
Extrusion Unit (EU-06)	S4	0.36	2.07
Extrusion Unit (EU-07)	S5	0.36	2.07
Laminator (EU-14)	S14	0.442	2.30
Laminator (EU-12)	S8	0.442	2.30
Laminator (EU-16)	S16	0.442	2.30
Laminator (EU-18)	S19	0.442	2.30
Laminator (EU-20)	S25	0.442	2.30

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-11]

Pursuant to 326 IAC 8-2-11 (Fabric and Vinyl Coating VOC Limitations), the VOC content of the coatings used in the rotogravure presses EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19 to completely saturate the substrate shall be limited to 4.8 pounds of VOC per gallon of coating less water delivered to the applicator.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 2-8]

Pursuant to 326 IAC 2-8:

- (a) The total material compounded from extruders EU-06 and EU-07 shall not exceed 12,779,088 pounds per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The emission rate from each of the extruders (EU-06 and EU-07) shall not exceed 0.0043 pounds of VOC per pound of material compounded.
- (c) The total VOC input for the rotogravure presses (identified as EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 23.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) The emission rate from each of the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20) shall not exceed 0.0065 pounds of VOC per yard of film processed.
- (e) The total amount of film processed from the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20) shall not exceed 12,000,000 yards per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the limits in (a) through (e) above in conjunction with the VOC potential emissions from the insignificant activities at the source will limit the source-wide VOC PTE to less than 100 tons per twelve (12) consecutive month period and therefore, render the requirements of 326 IAC 2-7 (Part 70 rules) and 326 IAC 2-2 (PSD) not applicable.

D.1.4 Hazardous Air Pollutants (HAPs) [326 IAC 2-8]

Pursuant to 326 IAC 2-8:

- (a) The total input of a single HAP to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limit in conjunction with the single HAP emissions from the insignificant activities at the source will limit the source-wide single HAP PTE to less than 10 tons per twelve (12) consecutive month period and therefore, render the requirements of 326 IAC 2-7 (Part 70 rules) not applicable.

- (b) The total input of a combination of HAPs to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 24 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limit in conjunction with the HAPs emissions from the insignificant activities at the source will limit the source-wide combined HAP PTE to less than 25 tons per twelve (12) consecutive month period and therefore, render the requirements of 326 IAC 2-7 (Part 70 rules) not applicable.

D.1.5 Volatile Organic Compounds [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the amount of film processed from each of the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20) shall not exceed 7,661,538 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit in conjunction with the VOC emission limit specified in Condition D.1.3(d) will limit the VOC emission to less than 25 tons per year from each of these facilities, and therefore render the requirements of 326 IAC 8-1-6 not applicable to the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20).

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.1.7 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)

Compliance with the VOC and HAP content and usage limitations contained in Conditions D.1.2 D.1.3(c), D.1.4(a) and D.1.4(b) 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.1.8 Particulate Control [326 IAC 2-8-5(a)(4)]

In order to comply with D.1.1, the baghouses for PM control shall be in operation and control emissions from the silos (EU-01, and EU-02) and the plastic film mixing line (EU-05) at all times that the plastic film manufacturing is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.9 Visible Emissions Notations

- (a) Visible emission notations of the plastic film mixing line (EU-05) baghouse stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations from each storage silo (EU-01 and EU-02) baghouse stack exhaust shall be performed during loading operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed, the Permittee shall take reasonable steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regards to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse associated with the plastic film mixing line (EU-05), at least once per day when any plastic film line is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from

this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.11 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the failed unit shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.12 Record Keeping Requirement

- (a) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of the visible emission notations of each plastic film line (EU-05) stack exhaust once per day and the visible emission notations performed during loading operations of the silos (EU-01 and EU-02). The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (i.e., the process did not operate that day).
- (b) To document the compliance status with Condition D.1.10, the Permittee shall maintain records of the pressure drop during normal operation for the plastic film mixing line (EU-05) once per day. The Permittee shall include in its daily record when a pressure drop notation is not taken and the reason for the lack of visible emission notation (i.e., the process did not operate that day).
- (c) To document the compliance status with VOC content limit in Condition D.1.2, VOC input limit in Condition D.1.3(c), and HAPs input limits in Conditions D.1.4(a) and D.1.4(b), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with VOC content limit in Condition D.1.2, VOC input limit in Condition D.1.3(c), and HAPs input limits in Conditions D.1.4(a) and D.1.4(b).
 - (1) The VOC and HAP content of each coating material and solvent used.
 - (2) The amount of coating material and solvent less water used on monthly basis.

- (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (C) A log of the dates of use.
- (3) The cleanup solvent usage for each month.
- (4) The total VOC and HAP usage for each month.
- (5) The weight of VOCs and HAPs usage for each compliance period.
- (d) To document the compliance status with Condition D.1.3(a) the Permittee shall maintain records of the total material compounded by the extruders (identified as EU-06 and EU-07) per month.
- (e) To document the compliance status with Condition D.1.3(e), the Permittee shall maintain records of the total film processed by all the laminators (identified as EU-12, EU-14, EU-16, EU-18, and EU-20) per month.
- (f) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of the total film processed by each of the laminators (identified as EU-12, EU-14, EU-16, EU-18, and EU-20) per month.
- (e) 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

A quarterly summary of the information to document the compliance status with D.1.3(a), D.1.3(c), D.1.3(e), D.1.4 and D.1.5 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1)

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

- (a) Natural gas fired combustion sources with the heat input equal to or less than ten (10) million BTU per hour:
 - (1) One (1) natural gas-fired boiler rated at 2.7 MMBtu/hr [326 IAC 6-2-4];
 - (2) One (1) natural gas-fired space heater rated at 0.58 MMBtu/hr;
 - (3) Eight (8) natural gas-fired space heaters rated at 0.09 MMBtu/hr each;
 - (4) Six (6) natural gas-fired space heaters rated at 0.1 MMBtu/hr each;
 - (5) Two (2) natural gas-fired space heaters rated at 0.12 MMBtu/hr each;
 - (6) One (1) natural gas-fired space heater rated at 0.83 MMBtu/hr;
 - (7) One (1) natural gas-fired space heater rated at 0.12 MMBtu/hr;
 - (8) Two (2) natural gas-fired ovens for Machine 1 Printer (Tinter/Washcoater) (EU-09) each rated at 0.4 MMBtu/hr;
 - (9) Four (4) natural gas-fired ovens for Machine 2 Printer (Profama) (EU-11) each rate at 0.75 MMBtu/hr;
 - (10) One (1) natural gas-fired oven for Machine 4 Printer (W&H3) (EU-15) rated at 3.00 MMBtu/hr; and
 - (11) Four (4) natural gas-fired ovens for Machine 6 Printer (W&H6) (EU-17), each rated at 0.75 MMBtu/hr.
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts [326 IAC 8-3-2] [326 IAC 8-3-5][326 IAC 8-3-8];
- (c) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (d) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (e) Closed loop heating and cooling systems;
- (f) Natural draft cooling towers not regulated under a NESHAP;
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (h) Paved and unpaved roads and parking lots with public access [326 IAC 6-4];
- (i) Blow down for sight glass, boiler, compressors, pumps, and cooling towers.
- (j) Emission units whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):

- (1) Three (3) granulators that chop waste film and recirculate to the mixing line; and
- (2) One (1) plastisol mixing line.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the 2.7 million BTU/hour natural gas-fired boiler, and the two (2) 0.75 million BTU/hour natural gas-fired indirect heaters shall not exceed 0.60 pounds PM per million BTU heat input.

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the brazing, soldering, welding, and cutting torch equipment or the three (3) granulators that chop waste film shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.3 Volatile Organic Compounds [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

The degreasing operation shall comply with the following requirements:

- (a) Pursuant to 326 IAC 8-3-2, the owner or operator shall:
 - (1) Equip the cleaner with a cover;
 - (2) Equip the cleaner with a facility for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label summarizing the operation requirements; and
 - (6) 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.
- (b) Pursuant to 326 IAC 8-3-5(a), 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 hand if:
 - A) The solvent volatility is greater than three-tenths (0.3) pounds per square inch (15 millimeters of mercury) measured at 38 degrees Celsius (100 degrees Fahrenheit);

- 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 six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), 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 326 IAC 8-3-5(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 six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
- A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) Pursuant to 326 IAC 8-3-5(b), 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) Pursuant to 326 IAC 8-3-8, users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components, shall ensure that the following operating requirements are met:
- (1) On and after November 1, 1999, no person shall do the following:
 - (A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch)

measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.

- (B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (2) On and after May 1, 2001, no person shall do the following:
- (A) Cause or allow the sale of solvents for use in cold cleaning degreasing operations with a vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.
 - (B) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (3) On and after November 1, 1999, the following record keeping requirements shall be followed:
- (A) All persons subject to (d)(1)(A) and (d)(2)(A) above shall maintain all of the following records for each sale:
 - (i) The name and address of the solvent purchaser.
 - (ii) The date of sale.
 - (iii) The type of solvent.
 - (iv) The volume of each unit of solvent sold.
 - (v) The total volume of the solvent.
 - (vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
 - (B) All persons subject to the requirements of subsection (d)(1)(B) and (d)(2)(B) above shall maintain each of the following records for each purchase:
 - (i) The name and address of the solvent supplier.
 - (ii) The date of purchase.
 - (iii) The type of solvent.
 - (iv) The volume of each unit of solvent.
 - (v) The total volume of the solvent.
 - (vi) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (4) All records required by subsection (3) above shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Rotogravure Presses

- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as Machine 1 Printer (Tinter/Washcoater) (EU-09), with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as Machine 2 Printer (Profama) (EU-11), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as Machine 3 Printer (Magnat) (EU-13), with a maximum coverage of 14.4 pounds of ink per million in² of PVC sheet vinyl per head (lb/million in²/head), exhausting to stack S12 and S13;
- (h) One (1) rotogravure press with six (6) color printing heads, identified as Machine 4 Printer (W&H3) (EU-15), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S15;
- (i) One (1) rotogravure press with four (4) color printing heads, identified as Machine 6 Printer (W&H6) (EU-17), installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S18;
- (j) One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;

Pursuant to 40 CFR 60, Subpart FFF, the emission units EU-09, EU-11, EU-15, EU-17, and EU-19 above are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 12]

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1][40 CFR Part 60, Subpart A]

- (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 facilities described in this section except as otherwise specified in CFR Part 60, Subpart FFF.
- (b) Pursuant to 40 CFR 60.1, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Standards of Performance for Flexible Vinyl and Urethane Coating and Printing [40 CFR Part 60, Subpart FFF][326 IAC 12]

- (a) Pursuant to 40 CFR Part 60, Subpart FFF, the Permittee shall comply with the provisions of Standards of Performance for Flexible Vinyl and Urethane Coating and Printing (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12 for the rotogravure printers as specified as follows:
- (1) 40 CFR 60.580 (a) and (b)
 - (2) 40 CFR 60.581
 - (3) 40 CFR 60.582(a)(1)
 - (4) 40 CFR 60.583 (a), (b), and (c)
 - (5) 40 CFR 60.585 (a), (b)(1), (c), and (d)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039

**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:

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**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• 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 Describe:
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

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
 Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
 FESOP No.: F043-15615-00039
 Facility: Laminators EU-12, EU-14, EU-16, EU-18, and EU-20
 Parameter: Film Produced
 Limit: 7,661,538 yards of film processed from each of the laminators (EU-12, EU-14, EU-16, EU-18, and EU-20) per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

	Column 1					Column 2					Column 1 + Column 2				
	This Month					Previous 11 Months					12 Month Total				
	EU-12	EU-14	EU-16	EU-18	EU-20	EU-12	EU-14	EU-16	EU-18	EU-20	EU-12	EU-14	EU-16	EU-18	EU-20
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**

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039
Facility: Extruders EU-06 and EU-07
Parameter: Material Compounded
Limit: Total of 12,779,088 pounds of material compounded per twelve (12) consecutive month period with compliance determined at the end of each month for extruders EU-06 and EU-07.

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**

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039
Facility: Printing Presses: EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19
Parameter: Total VOC Input
Limit: Twenty-three (23) tons VOC input per twelve (12) consecutive month period with compliance determined at the end of the month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Facility: Printing Presses: EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19
Parameter: Total Single HAP Input
Limit: Nine (9) tons of input of a single HAP per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039
Facility: Printing Presses: EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19
Parameter: Combination of HAPs Input
Limit: Twenty-four (24) tons of input of a combination of HAPs per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCMENT BRANCH**

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP No.: F043-15615-00039
Facility: Laminators (EU-14, EU-12, EU-16, EU-18, and EU-20)
Parameter: Total Film Produced from Laminators (EU-14, EU-12, EU-16, EU-18, and EU-20)
Limit: 12,000,000 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP Permit No.: F043-24598-00039

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of paragraph (a) Section C - General Reporting. 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.</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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: _____

**Federally Enforceable State Operating Permit (FESOP)
OFFICE OF AIR QUALITY**

**Product Specialties Inc.
New Albany, Indiana**

Attachment A

Title 40: Protection of Environment

**PART 60 – STANDARDS OF PERFORMANCE FOR NEW STATIONARY
SOURCES (NSPS)**

**Subpart FFF
Standards of Performance for Vinyl and Urethane Coating
and Printing**

§ 60.580 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each rotogravure printing line used to print or coat flexible vinyl or urethane products.

(b) This subpart applies to any affected facility which begins construction, modification, or reconstruction after January 18, 1983.

(c) For facilities controlled by a solvent recovery emission control device, the provisions of §60.584(a) requiring monitoring of operations will not apply until EPA has promulgated performance specifications under appendix B for the continuous monitoring system. After the promulgation of performance specifications, these provisions will apply to each affected facility under paragraph (b) of this section. Facilities controlled by a solvent recovery emission control device that become subject to the standard prior to promulgation of performance specifications must conduct performance tests in accordance with §60.13(b) after performance specifications are promulgated.

§ 60.581 Definitions and symbols.

(a) All terms used in this subpart, not defined below, are given the same meaning as in the Act or in subpart A of this part.

Emission control device means any solvent recovery or solvent destruction device used to control volatile organic compounds (VOC) emissions from flexible vinyl and urethane rotogravure printing lines.

Emission control system means the combination of an emission control device and a vapor capture system for the purpose of reducing VOC emissions from flexible vinyl and urethane rotogravure printing lines.

Flexible vinyl and urethane products mean those products, except for resilient floor coverings (1977 Standard Industry Code 3996) and flexible packaging, that are more than 50 micrometers (0.002 inches) thick, and that consist of or contain a vinyl or urethane sheet or a vinyl or urethane coated web.

Gravure cylinder means a plated cylinder with a printing image consisting of minute cells or indentations, specifically engraved or etched into the cylinder's surface to hold ink when continuously revolved through a fountain of ink.

Ink means any mixture of ink, coating solids, organic solvents including dilution solvent, and water that is applied to the web of flexible vinyl or urethane on a rotogravure printing line.

Ink solids means the solids content of an ink as determined by Method 24, ink manufacturer's formulation data, or plant blending records.

Inventory system means a method of physically accounting for the quantity of ink, solvent, and solids used at one or more affected facilities during a time period. The system is based on plant purchase or inventory records.

Plant blending records means those records which document the weight fraction of organic solvents and solids used in the formulation or preparation of inks at the vinyl or urethane printing plant where they are used.

Rotogravure print station means any device designed to print or coat inks on one side of a continuous web or substrate using the intaglio printing process with a gravure cylinder.

Rotogravure printing line means any number of rotogravure print stations and associated dryers capable of printing or coating simultaneously on the same continuous vinyl or urethane web or substrate, which is fed from a continuous roll.

Vapor capture system means any device or combination of devices designed to contain, collect, and route organic solvent vapors emitted from the flexible vinyl or urethane rotogravure printing line.

(b) All symbols used in this subpart not defined below are given the same meaning as in the Act or in subpart A of this part.

a=the gas stream vents exiting the emission control device.

b=the gas stream vents entering the emission control device.

f=the gas stream vents which are not directed to an emission control device.

C_{aj} =the concentration of VOC in each gas stream (j) for the time period exiting the emission control device, in parts per million by volume.

C_{bi} =the concentration of VOC in each gas stream (i) for the time period entering the emission control device, in parts per million by volume.

C_{fk} =the concentration of VOC in each gas stream (k) for the time period which is not directed to an emission control device, in parts per million by volume.

G=the weighted average mass of VOC per mass of ink solids applied, in kilograms per kilogram.

M_{ci} =the total mass of each ink (i) applied in the time period as determined from plant records, in kilograms.

M_{dj} =the total mass of each dilution solvent (j) added at the print line in the time period determined from plant records, in kilograms.

Q_{aj} =the volumetric flow rate of each effluent gas stream (j) exiting the emission control device, in standard cubic meters per hour.

Q_{bi} =the volumetric flow rate of each effluent gas stream (i) entering the emission control device, in standard cubic meters per hour.

Q_{fk} =the volumetric flow rate of each effluent gas stream (k) not directed to an emission control device, in standard cubic meters per hour.

E=the VOC emission reduction efficiency (as a fraction) of the emission control device during performance testing.

F=the VOC emission capture efficiency (as a fraction) of the vapor capture system during performance testing.

W_{oi} =the weight fraction of VOC in each ink (i) used in the time period as determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{si} means the weight fraction of solids in each ink (i) used in the time period as determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{oj} =the weight fraction of VOC in each dilution solvent (j) added at the print line in the time period determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

§ 60.582 Standard for volatile organic compounds.

(a) On and after the date on which the performance test required by §60.8 has been completed, each owner or operator subject to this subpart shall either:

- (1) Use inks with a weighted average VOC content less than 1.0 kilogram VOC per kilogram ink solids at each affected facility, or
- (2) Reduce VOC emissions to the atmosphere by 85 percent from each affected facility.

§ 60.583 Test methods and procedures.

(a) Methods in appendix A of this part, except as provided under §60.8(b), shall be used to determine compliance with §60.582(a) as follows:

- (1) Method 24 for analysis of inks. If nonphotochemically reactive solvents are used in the inks, standard gas chromatographic techniques may be used to identify and quantify these solvents. The results of Method 24 may be adjusted to subtract these solvents from the measured VOC content.
- (2) Method 25A for VOC concentration (the calibration gas shall be propane);
- (3) Method 1 for sample and velocity traverses;
- (4) Method 2 for velocity and volumetric flow rates;
- (5) Method 3 for gas analysis;
- (6) Method 4 for stack gas moisture.

(b) To demonstrate compliance with §60.582(a)(1), the owner or operator of an affected facility shall determine the weighted average VOC content of the inks according to the following procedures:

- (1) Determine and record the VOC content and amount of each ink used at the print head, including the VOC content and amount of diluent solvent, for any time periods when VOC emission control equipment is not used.
- (2) Compute the weighted average VOC content by the following equation:

$$G = \frac{\sum_{i=1}^n (W_{0i} M_{ci}) + \sum_{j=1}^m (W_{0j} M_{dj})}{\sum_{i=1}^n (M_{ci} W_{si})}$$

- (3) The weighted average VOC content of the inks shall be calculated over a period that does not exceed one calendar month, or four consecutive weeks. A facility that uses an accounting system based on quarters consisting of two 28 calendar day periods and one 35 calendar day period may use an averaging period of 35 calendar days four times per year, provided the use of such an accounting system is documented in the initial performance test.
- (4) Each determination of the weighted average VOC content shall constitute a performance test for any period when VOC emission control equipment is not used. Results of the initial performance test must be reported to the Administrator. Method 24 or ink manufacturers' formulation data along with plant blending records (if plant blending is done) may be used to determine VOC content. The Administrator may require the use of Method 24 if there is a question concerning the accuracy of the ink manufacturer's data or plant blending records.
- (5) If, during the time periods when emission control equipment is not used, all inks used contain less than 1.0 kilogram VOC per kilogram ink solids, the owner or operator is not required to calculate the weighted average VOC content, but must verify and record the VOC content of each ink (including any added dilution solvent) used as determined by Method 24, ink manufacturers' formulation data, or plant blending records.

(c) To demonstrate compliance with §60.582(a)(1), the owner or operator may determine the weighted average VOC content using an inventory system.

(1) The inventory system shall accurately account to the nearest kilogram for the VOC content of all inks and dilution solvent used, recycled, and discarded for each affected facility during the averaging period. Separate records must be kept for each affected facility.

(2) To determine VOC content of inks and dilution solvent used or recycled, Method 24 or ink manufacturers' formulation data must be used in combination with plant blending records (if plant blending is done) or inventory records or purchase records for new inks or dilution solvent.

(3) For inks to be discarded, only Method 24 shall be used to determine the VOC content. Inks to be discarded may be combined prior to measurement of volume or weight and testing by Method 24.

(4) The Administrator may require the use of Method 24 if there is a question concerning the accuracy of the ink manufacturer's data or plant records.

(5) The Administrator shall approve the inventory system of accounting for VOC content prior to the initial performance test.

(d) To demonstrate compliance with §60.582(a)(2), the owner or operator of an affected facility controlled by a solvent recovery emission control device or an incineration control device shall conduct a performance test to determine overall VOC emission control efficiency according to the following procedures:

(1) The performance test shall consist of three runs. Each test run must last a minimum of 30 minutes and shall continue until the printing operation is interrupted or until 180 minutes of continuous operation occurs. During each test run, the print line shall be printing continuously and operating normally. The VOC emission reduction efficiency achieved for each test run is averaged over the entire test run period.

(2) VOC concentration values at each site shall be measured simultaneously.

(3) The volumetric flow rate shall be determined from one Method 2 measurement for each test run conducted immediately prior to, during, or after that test run. Volumetric flow rates at each site do not need to be measured simultaneously.

(4) In order to determine capture efficiency from an affected facility, all fugitive VOC emissions from the affected facility shall be captured and vented through stacks suitable for measurement. During a performance test, the owner or operator of an affected facility located in an area with other sources of VOC shall isolate the affected facility from other sources of VOC. These two requirements shall be accomplished using one of the following methods:

(i) Build a permanent enclosure around the affected facility;

(ii) Build a temporary enclosure around the affected facility and duplicate, to an extent that is reasonably feasible, the ventilation conditions that are in effect when the affected facility is not enclosed (one way to do this is to divide the room exhaust rate by the volume of the room and then duplicate that quotient or 20 air changes per hour, whichever is smaller, in the temporary enclosure); or

(iii) Shut down all other sources of VOC and continue to exhaust fugitive emissions from the affected facility through any building ventilation system and other room exhausts such as print line ovens and embossers.

(5) For each affected facility, compliance with §60.582(a)(2) has been demonstrated if the average value of the overall control efficiency (EF) for the three runs is equal to or greater than 85 percent. An overall control efficiency is calculated for each run as follows:

(i) For efficiency of the emission control device,

$$E = \frac{\sum_{i=1}^n (Q_{bi} C_{bi}) - \sum_{j=1}^m (Q_{aj} C_{aj})}{\sum_{i=1}^n (Q_{bi} C_{bi})}$$

(ii) For efficiency of the vapor capture system,

$$F = \frac{\sum_{i=1}^n (Q_{bi} C_{bi})}{\sum_{i=1}^n (Q_{bi} C_{bi}) + \sum_{k=1}^p (Q_{fk} C_{fk})}$$

§ 60.584 Monitoring of operations and recordkeeping requirements.

(a) The owner or operator of an affected facility controlled by a solvent recovery emission control device shall install, calibrate, operate, and maintain a monitoring system which continuously measures and records the VOC concentration of the exhaust vent stream from the control device and shall comply with the following requirements:

(1) The continuous monitoring system shall be installed in a location that is representative of the VOC concentration in the exhaust vent, at least two equivalent stack diameters from the exhaust point, and protected from interferences due to wind, weather, or other processes.

(2) During the performance test, the owner or operator shall determine and record the average exhaust vent VOC concentration in parts per million by volume. After the performance test, the owner or operator shall determine and, in addition to the record made by the continuous monitoring device, record the average exhaust vent VOC concentration for each 3-hour clock period of printing operation when the average concentration is greater than 50 ppm and more than 20 percent greater than the average concentration value demonstrated during the most recent performance test.

(b) The owner or operator of an affected facility controlled by a thermal incineration emission control device shall install, calibrate, operate, and maintain a monitoring device that continuously measures and records the temperature of the control device exhaust gases and shall comply with the following requirements:

(1) The continuous monitoring device shall be calibrated annually and have an accuracy of ± 0.75 percent of the temperature being measured, expressed in degrees Celsius, or ± 2.5 °C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average temperature of the control device exhaust gases. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average temperature for each 3-hour clock period of printing operation when the average temperature of the exhaust gases is more than 28 °C (50 °F) below the average temperature demonstrated during the most recent performance test.

(c) The owner or operator of an affected facility controlled by a catalytic incineration emission control device shall install, calibrate, operate, and maintain monitoring devices that continuously measure and record the gas temperatures both upstream and downstream of the catalyst bed and shall comply with the following requirements:

(1) Each continuous monitoring device shall be calibrated annually and have an accuracy of ± 0.75 percent of the temperature being measured, expressed in degrees Celsius, or ± 2.5 °C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average gas temperature both upstream and downstream of the catalyst bed. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average temperatures for each 3-hour clock period of printing operation when the average temperature of the gas stream before the catalyst bed is more than 28 °C below the average temperature demonstrated during the most recent performance test or the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test.

(d) The owner or operator of an affected facility shall record time periods of operation when an emission control device is not in use.

§ 60.585 Reporting requirements.

(a) For all affected facilities subject to compliance with §60.582, the performance test data and results from the performance test shall be submitted to the Administrator as specified in §60.8(a).

(b) The owner or operator of each affected facility shall submit semiannual reports to the Administrator of occurrences of the following:

(1) Exceedances of the weighted average VOC content specified in §60.582(a)(1);

(2) Exceedances of the average value of the exhaust vent VOC concentration as defined under §60.584(a)(2);

(3) Drops in the incinerator temperature as defined under §60.584(b)(2); and

(4) Drops in the average temperature of the gas stream immediately before the catalyst bed or drops in the average temperature across the catalyst bed as defined under §60.584(c)(2).

(c) The reports required under paragraph (b) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

(d) The requirements of this subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with requirements established by the State.

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the Technical Support Document (ATSD) for a Significant
Permit Revision to a Federally Enforceable State Operating Permit
(FESOP)

Source Background and Description

Source Name:	Product Specialties, Inc.
Source Location:	2073 McDonald Avenue, New Albany, Indiana 47150
County:	Floyd
SIC Code:	3081 (Unsupported Plastics Film and Sheet)
Operation Permit No.:	F043-24598-00039
Operation Permit Issuance Date:	May 27, 2008
Significant Permit Revision No.:	043-32326-00039
Permit Reviewer:	Ryan Graunke

On November 6, 2012 the Office of Air Quality (OAQ) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Product Specialties, Inc. had applied for a FESOP Significant Permit Revision to add a new rotogravure printer and laminator to an existing stationary vinyl wall covering manufacturing operation. The notice also stated that the OAQ proposed to issue a FESOP Significant Permit Revision for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On November 19, 2012, Holly Padovani submitted comments on behalf of Product Specialties, Inc. to IDEM, OAQ on the draft FESOP Significant Permit Revision.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

- Pages 6 and 29 of the permit and Page 23 of 27 in the TSD list a natural gas oven for the Magnat printer. This reference is incorrect and the correction should read "One natural gas fired oven for Machine 4 Printer (W&H3)(EU-15) rated at 3 MMBTU/hr".
- Several pages in the TSD refer to the HAP Triethylamine as Triethylene instead. Pages 1 found were 4, 5, and 6 of 27 and Page 1 of 9 in TSD, Appendix A. There could be other references.

Response to Comment 1:

IDEM agrees with the recommended changes. The permit has been revised as follows:

...

A.3 Insignificant Activities [~~326 IAC 2-7-1(21)~~][**326 IAC 2-8-3(c)(3)(I)**]

...

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

- ...
 (10) One (1) natural gas-fired oven for Machine 4 Printer (~~Magna~~**W&H3**) (EU-15) rated at 3.00 MMBtu/hr; and
 ...

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities	
(a)	Natural gas fired combustion sources with the heat input equal to or less than ten (10) million BTU per hour:
...	
(10)	One (1) natural gas-fired oven for Machine 4 Printer (Magna W&H3) (EU-15) rated at 3.00 MMBtu/hr; and
...	

The table below summarizes the potential to emit of the entire source (*reflecting adjustment of existing limits*), with updated emissions shown as **bold** values and previous emissions shown as ~~strike through~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Storage Silos (EU-01 & EU-02)	41.57	41.57	41.57	--	--	--	--	--	--	--
Plastic film mixing (EU-05)	12.38	12.38	12.38	--	--	--	--	--	--	--
Extruders (EU-06 & 07)	14.82	14.82	14.82	--	--	27.48	--	--	--	--
Rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, EU-19) ³	--	--	--	--	--	23.0	--	--	24.00	9 (Triethylene Triethylamine)
Laminators (EU-12, EU-14, EU-16, EU-18, EU-20) ⁴	3.00	3.00	3.00	--	--	39.0	--	--	--	--
Natural Gas Combustion (Insignificant)	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082	0.13	0.12 (Hexane)
Other Insignificant activities	0.05	0.05	0.05	--	--	5.50	--	--	0.11	negl.
Total PTE of Entire Source	71.94	72.32	72.32	0.04	6.69	95.34	5.62	8,082	24.24	9 (Triethylene Triethylamine)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA
<p>¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".</p> <p>² The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p> <p>³ As requested by the source, the new rotogravure press (EU-19) has been included in the VOC, single HAP, and combined HAPs cap limits (specified in Conditions D.1.3(c), D.1.4(a), and D.1.4(b) of FESOP Administrative Amendment 043-32207-00039).</p> <p>⁴ As requested by the source, the new laminator (EU-20) has been included in the existing VOC cap limit (specified in Conditions D.1.3 (e) of FESOP Administrative Amendment 043-32207-00039).</p>										

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Storage Silos (EU-01 & EU-02)	41.57	41.57	41.57	--	--	--	--	--	--	--
Plastic film mixing (EU-05)	12.38	12.38	12.38	--	--	--	--	--	--	--
Extruders (EU-06 & 07)	14.82	14.82	14.82	--	--	27.48	--	--	--	--
Rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, EU-19) ³	--	--	--	--	--	23.0	--	--	24.00	⁹ (Triethylamine)
Laminators (EU-12, EU-14, EU-16, EU-18, EU-20) ⁴	3.00	3.00	3.00	--	--	39.0	--	--	--	--
Natural Gas Combustion (Insignificant)	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082	0.13	0.12 (Hexane)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Other Insignificant activities	0.05	0.05	0.05	--	--	5.50	--	--	0.11	negl.
Total PTE of Entire Source	71.94	72.32	72.32	0.04	6.69	95.34	5.62	8,082	24.24	⁹ (Triethylamine)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA
¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". ² The 100,000 CO ₂ e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. ³ As requested by the source, the new rotogravure press (EU-19) has been included in the VOC, single HAP, and combined HAPs cap limits (specified in Conditions D.1.3(c), D.1.4(a), and D.1.4(b) of FESOP Administrative Amendment 043-32207-00039). ⁴ As requested by the source, the new laminator (EU-20) has been included in the existing VOC cap limit (specified in Conditions D.1.3 (e) of FESOP Administrative Amendment 043-32207-00039).										

Changes have also been made to calculations, included as ATSD, Appendix A

IDEM Contact

- (a) Questions regarding this proposed FESOP Significant Permit Revision can be directed to Ryan Graunke at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (b) A copy of the permit 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: Emission Calculations
Emission Summary**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Unlimited Potential Emissions (tons/year)											
Plant ID	Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	total HAPs	worst case single HAP
Resin Silo	EU-01	25.05	25.05	25.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaCO ₃ Silo	EU-02	16.51	16.51	16.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastic Mixing	EU-05	12.38	12.38	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extruder #1	EU-06	10.36	10.36	10.36	0.00	0.00	19.21	0.00	0.00	0.00	0.00
Extruder #2	EU-07	10.36	10.36	10.36	0.00	0.00	19.21	0.00	0.00	0.00	0.00
Machine 1 Printer (Tinter/Washcoater)	EU-09	0.00	0.00	0.00	0.00	0.00	13.43	0.00	0.00	1.94	1.94 Triethylamine
Machine 2 Printer (Profama)	EU-11	0.00	0.00	0.00	0.00	0.00	64.48	0.00	0.00	9.32	9.32 Triethylamine
Machine 3 Printer (Magnat)	EU-13	0.00	0.00	0.00	0.00	0.00	64.48	0.00	0.00	9.32	9.32 Triethylamine
Machine 4 Printer (W & H3)	EU-15	0.00	0.00	0.00	0.00	0.00	193.45	0.00	0.00	27.96	27.96 Triethylamine
Machine 6 Printer (W & H6)	EU-17	0.00	0.00	0.00	0.00	0.00	64.80	0.00	0.00	9.36	9.36 Triethylamine
Machine 7 Printer (Nakajima) - New	EU-19	0.00	0.00	0.00	0.00	0.00	191.75	0.00	0.00	27.71	27.71 Triethylamine
Machine 2 Laminator (Profama)	EU-12	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00
Machine 3 Laminator (Magnat)	EU-14	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00
Machine 4 Laminator (W & H3)	EU-16	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00
Machine 6 Laminator (W & H6)	EU-18	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00
Machine 7 Laminator (Nakajima) - New	EU-20	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00
Natural Gas Combustion	Insig	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082.33	0.13	0.12 Hexane
Other Insignificant Activities	Insig	0.05	0.05	0.05	0.00	0.00	5.50	0.00	0.00	0.11	0.00
Totals		84.70	85.08	85.08	0.04	6.69	764.81	5.62	8,082.33	85.84	57.90 Triethylamine

Limited Potential Emissions (tons/year)											
Plant ID	Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	total HAPs	worst case single HAP
Resin Silo	EU-01	25.05	25.05	25.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaCO ₃ Silo	EU-02	16.51	16.51	16.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastic Mixing	EU-05	12.38	12.38	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extruder #1	EU-06	7.41	7.41	7.41	0.00	0.00	13.74	0.00	0.00	0.00	0.00
Extruder #2	EU-07	7.41	7.41	7.41	0.00	0.00	13.74	0.00	0.00	0.00	0.00
Machine 1 Printer (Tinter/Washcoater)	EU-09	0.00	0.00	0.00	0.00	0.00	23.00	0.00	0.00	24.00	9.00 Triethylamine
Machine 2 Printer (Profama)	EU-11	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Machine 3 Printer (Magnat)	EU-13	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Machine 4 Printer (W & H3)	EU-15	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Machine 6 Printer (W & H6)	EU-17	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Machine 7 Printer (Nakajima) - New	EU-19	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Machine 2 Laminator (Profama)	EU-12	3.00	3.00	3.00	0.00	0.00		39.00	0.00		
Machine 3 Laminator (Magnat)	EU-14				0.00	0.00	0.00		0.00		
Machine 4 Laminator (W & H3)	EU-16				0.00	0.00	0.00		0.00		
Machine 6 Laminator (W & H6)	EU-18				0.00	0.00	0.00		0.00		
Machine 7 Laminator (Nakajima) - New	EU-20				0.00	0.00	0.00		0.00		
Natural Gas Combustion	Insig	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082.33	0.13	0.12 Hexane
Other Insignificant Activities	Insig	0.05	0.05	0.05	0.00	0.00	5.50	0.00	0.00	0.11	0.00
Totals		71.94	72.32	72.32	0.04	6.69	95.34	5.62	8,082.33	24.24	9.00

**Appendix A: Emission Calculations
Existing Bulk Material Storage & Handling (EU-01 & EU-02)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Raw Material	Unit ID Number	Max Rate (tons/hour)	PM/PM10 Emission Factor (lb PM/ton)	Uncontrolled PTE of PM/PM10 (tons/year)	Pollution Control (% efficiency)	Controlled PTE of PM/PM10 (tons/year)
Resin Silo	EU-01	0.44	13	25.05	99%	0.251
CaCO ₃ Silo	EU-02	0.29	13	16.51	99%	0.165
Totals:				41.6		0.42

Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material * 2000 lb/ton material
 Uncontrolled PTE of PM (tons/year) = Max Rate (tons/year) * Emission factor (lb PM/ton material) * 1 ton/2000 lb * 8760 hour/year
 Controlled PTE of PM (tons/year) = Uncontrolled PTE of PM (tons/year) * (1-Pollution Control (% efficiency))

**Appendix A: Emission Calculations
Existing Plastic Mixing Line (EU-05)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Plastic Film Mixing Process (EU-05)

Raw Material	Unit ID Number	Max Rate (ton/hour)	PM/PM10 Emission Factor (lb PM/ton)	Uncontrolled PTE of PM/PM10 (tons/year)	Pollution Control (% efficiency)	Controlled PTE of PM/PM10 (tons/year)
Dry Scale	EU-05-01	0.739	0.6	1.94	95%	0.097
Scale Transfer	EU-05-02	0.794	0.6	2.09	99%	0.021
Mixer Transfer	EU-05-03	0.794	0.6	2.09	99%	0.021
Cool Blend Transfer	EU-05-04	0.794	0.6	2.09	99%	0.021
Tote Transfer	EU-05-05	0.794	0.6	2.09	99%	0.021
Ribbon Blend Transfer	EU-05-06	0.794	0.6	2.09	99%	0.021
Totals:				12.4		0.201

Note:

Calculations were taken from original FESOP 043-6294-00039

Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material * 2000 lb/ton material

Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23

Uncontrolled PTE of PM (tons/year) = Max Rate (tons/year) * Emission factor (lb PM/ton material) * 1 ton/2000 lb * 8760 hour/year

Controlled PTE of PM (tons/year) = Uncontrolled PTE of PM (tons/year) * (1-Pollution Control (% efficiency))

**Appendix A: Emission Calculations
Existing Extruders (EU-06 and EU-07)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Unlimited Potential to Emit

Plant ID	Unit ID Number	Maximum Usage (lb cmpd/year)	VOC Emission Factor (lb VOC/lb cmpd)	Unlimited PTE of VOC (tons/year)	VCM Emission Factor ¹ (lb VCM/lb cmpd)	Unlimited PTE of VCM (tons/year)	PM/PM10 Emission Factor (lb PM/lb cmpd)	Unlimited PTE of PM/PM10 (tons/year)
Extruder #1	EU-06	8,935,200	0.0043	19.2	0.00001	0.0447	0.00232	10.36
Extruder #2	EU-07	8,935,200	0.0043	19.2	0.00001	0.0447	0.00232	10.36
Totals:		17,870,400		38.42		0.09		20.73

Limited Potential to Emit

Plant ID	Unit ID Number	Limited Usage (lb cmpd/year)	VOC Emission Factor (lb VOC/lb cmpd)	Limited PTE of VOC (tons/year)	VCM Emission Factor ¹ (lb VCM/lb cmpd)	Limited PTE of VCM (tons/year)	PM/PM10 Emission Factor (lb PM/lb cmpd)	Limited PTE of PM/PM10 (tons/year)
Extruder #1	EU-06	6,389,544	0.0043	13.7	0.00001	0.0319	0.00232	7.41
Extruder #2	EU-07	6,389,544	0.0043	13.7	0.00001	0.0319	0.00232	7.41
Totals:		12,779,088		27.48		0.06		14.82

Note:

Emission factors for the extruders were derived from actual stack test data from a similar source and used in FESOP No.: 043-15615-00039, issued January 22, 2003.
1) The maximum vinylchloride monomer (VCM) content of the PVC is 10ppm

Methodology:

Maximum Usage (lb cmpd/year) = 1020 lbs cmpd/hr * 8760 hrs/year

Unlimited PTE (tons/year) = Maximum usage (lb cmpd/year) * Emission factor (lb pollutant/lb cmpd) * 1 ton/2000 lbs

Limited PTE (tons/year) = Limited usage (lb cmpd/year) * Emission factor (lb pollutant/lb cmpd) * 1 ton/2000 lbs

**Appendix A: Emission Calculations
VOC for Rotogravure Presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Plant ID	Unit ID Number	Worst Case As-Applied Ink	Max Line Speed (feet/minute)	Max Width (inches)	Max Throughput (MMin ² /year)	Max Coverage per Head (lb/MMin ² /)	Laydown Rate (gal/MMin ² /printing head)	# of Printng Heads	Density (lb/gal)	Max Coverage (lb/MMin ²)	Weight % VOC	PTE of VOC (tons/year)
Machine 1 Printer (Tinter/Washcoater)	EU-09	WF-40-357	36	57	12,942	15.0	1.705	1	8.80	15.0	13.8%	13.43
Machine 2 Printer (Profama)	EU-11	WF-40-357	45	57	16,178	14.4	1.636	4	8.80	57.6	13.8%	64.48
Machine 3 Printer (Magnat)	EU-13	WF-40-357	45	57	16,178	14.4	1.636	4	8.80	57.6	13.8%	64.48
Machine 4 Printer (W & H3)	EU-15	WF-40-357	90	57	32,356	14.4	1.636	6	8.80	86.4	13.8%	193.45
Machine 6 Printer (W & H6)	EU-17	WF-40-357	45	57	16,178	14.47	1.644	4	8.80	57.9	13.8%	64.80
Machine 7 Printer (Nakajima) - New	EU-19	WF-40-357	90	57	32,356	14.27	1.622	6	8.80	85.6	13.8%	191.75
Total:												592.4

Note:

Max coverage per head provided in Secion A.2 of FESOP Administrative Amendment # 043-32207-00039 (EU-09,11,13,15, 17)

Laydown rate provided by source for EU-19

Worst Case As-Applied Ink information provided by source on October 24, 2012

Lines speeds corrected by information provided by source on October 24, 2012

Methodology:

MMin² = Million inch square

Max. throughput (MMin²/year) = Max line speed (feet/min) * 12 inches/feet * Max print width (inches) * 60 min/hour * 8760 hours/year * 1 MMin²/1,000,000 in²

Laydown rate (gal/MMin²/printing head) (EU-09,11,13,15, 17)= Maximum coverage per head (lb/MMin²/printing head) / Density (lb/gal)

Maximum coverage per head (lb/MMin²/printing head) (EU-19) = Laydown rate (gal/MMin²/printing head) * Density (lb/gal)

Maximum Coverage (lb./MMin²) = Maximum coverage per print head (lb/MMin²/printing head) * Number of printing heads

PTE of VOC (tons/year) = Max. coverage (lbs/MMin²) * Weight % VOC * Max. throughput (MMin²/year) * 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC for Rotogravure Presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19)

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Administrative Amendment: 043-32326-00039
Reviewer: Ryan Graunke

Plant ID	Unit ID Number	Worst Case As-Applied Ink	Max Throughput (MMin ² /year)	Max Coverage (lb/MMin ²)	Weight % Triethylamine	PTE of Triethylamine (tons/year)	PTE of Total HAPs (tons/year)
Machine 1 Printer (Tinter/Washcoater)	EU-09	WF-40-357	12,942	15	2.00%	1.94	1.94
Machine 2 Printer (Profama)	EU-11	WF-40-357	16,178	57.6	2.00%	9.32	9.32
Machine 3 Printer (Magnat)	EU-13	WF-40-357	16,178	57.6	2.00%	9.32	9.32
Machine 4 Printer (W & H3)	EU-15	WF-40-357	32,356	86.4	2.00%	27.96	27.96
Machine 6 Printer (W & H6)	EU-17	WF-40-357	16,178	57.9	2.00%	9.36	9.36
Machine 7 Printer (Nakajima) - New	EU-19	WF-40-357	32,356	85.6	2.00%	27.71	27.71
Totals:						85.61	85.61

Note:

Worst Case As-Applied Ink information provided by source on October 24, 2012

Methodology:

MMin² = Million inch square

PTE of HAP (tons/year) = Max Throughput (MMin²/yr) * Max Coverage (lb/MMin²) * Weight % HAP * 1 ton/2,000 lbs

**Appendix A: Emission Calculations
Laminators (EU-12, EU-14, EU-16, EU-18, and EU-20)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Unlimited PTE of each laminator

Plant ID	Unit ID Number	Maximum Usage (yards/hour)	Maximum Usage (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Unlimited PTE of VOC (tons/year)	PM/PM10 Emission Factor (lb PM/yard)	Unlimited PTE of PM/PM10 (tons/year)
Machine 2 Laminator (Profama)	EU-12	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 3 Laminator (Magnat)	EU-14	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 4 Laminator (W & H3)	EU-16	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 6 Laminator (W & H6)	EU-18	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 7 Laminator (Nakajima) - New	EU-20	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Totals:						128		9.9

Limited PTE of each laminator to comply with 326 IAC 8-1-6

Plant ID	Unit ID Number	Limited Usage (yards/hour)	Limited Usage ¹ (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Limited PTE of VOC (tons/year)	326 IAC 8-1-6 Limit (tons/year)	Will Comply?
Machine 2 Laminator (Profama)	EU-12	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 3 Laminator (Magnat)	EU-14	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 4 Laminator (W & H3)	EU-16	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 6 Laminator (W & H6)	EU-18	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 7 Laminator (Nakajima) - New	EU-20	NA	7,661,538	NA	0.0065	24.9	25	Yes

Limited PTE of all laminators to avoid 326 IAC 2-7 and 326 IAC2-2

Plant ID	Unit ID Number	Limited Usage (yards/hour)	Limited Usage ² (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Limited PTE of VOC (tons/year)	PM/PM10 Emission Factor (lb PM/yard)	Limited PTE of PM/PM10 (tons/year)
All Laminators	EU-12, 14, 16, 18, 20	NA	12,000,000	NA	0.0065	39.0	0.0005	3.00
Totals:						39.0		3.00

Note:

Maximum Usage corrected according to information provided by source on October 24, 2012

Emission factors for the laminator were derived from actual stack test data from a similar source and used in FESOP No.: 043-15615-00039, issued January 22, 2003.

1) Permitted usage limited to 7,661,538 yards/year for each any individual laminator to avoid 326 IAC 8-1-6 applicability threshold of 25 tons/year PTE of VOC

2) Permitted usage limited to 12,000,000 yards/year for all five units, including new unit, to avoid 326 IAC 2-7 (Part 70 rules) and 326 IAC 2-2 (PSD)

Methodology:

Maximum usage (yards/year) = 900 (yards/hour) * 8760 hours/year

Process throughput (tons/hour) = Maximum usage (yards/hour) * 15 oz/yard * 1 lb/16 oz * 1 ton/2000 lb

Unlimited PTE of VOC/PM/PM10 (tons/year) = Unlimited Usage (yards/year) * Emission Factor (lb/yard) * 1 ton/2000 lbs

Limited PTE of VOC/PM/PM10 (tons/year) = Limited Usage (yards/year) * Emission Factor (lb/yard) * 1 ton/2000 lbs

Appendix A: Emission Calculations
Ink Compliance to 326 IAC 8-2-11 and NSPS Subpart FFF

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Machine 7 Printer Compliance with 326 IAC 8-2-11 (Surface Coating VOC Emission Limitations for Fabric and Vinyl Coating)

Worst Case As-Applied Ink	Density (lb/Gal)	Weight % Volatile (H2O & VOC)	Weight % Solids (non-volatile)	Weight % Water	Weight % VOC	Volume % Water	lbs VOC/gal. of ink less water	326 IAC 8-2-11 Limit (lbs VOC/gal. of ink less water)	Will Comply?
WF-40-357	8.8	69.0%	31.0%	55.2%	13.8%	58.2%	2.91	4.8	Yes

Machine 7 Printer Compliance with NSPS Subpart FFF

Worst Case As-Applied Ink	Density (lb/Gal)	Weight % Volatile (H2O & VOC)	Weight % Solids (non-volatile)	Weight % Water	Weight % VOC	Volume % Water	lbs VOC/lb ink solids	NSPS Subpart FFF Limit (lbs VOC/lb of ink solids)	Will Comply?
WF-40-357	8.8	69.0%	31.0%	55.2%	13.8%	58.2%	0.45	1.0	Yes

Note:

Worst Case As-Applied Ink information provided by source on October 24, 2012

Methodology:

Volume % Water = Weight % Water * Density (lb/gal) / Density of water (8.345 lbs/gal)

Lbs. VOC/gal. of ink less water = Density (lb/gal) * Weight % VOC / (1-Volume % Water)

Lbs. VOC/lb of ink solids = Weight % VOC / Weight % Solids

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

Company Name: Product Specialties, Inc.
Address City IN Zip: 2073 McDonald Avenue, New Albany, Indiana 47150
Permit Number: 043-32326-00039
Reviewer: Ryan Graunke

Emission units	Number of Unit	Heat Input Capacity Each (MMBTU/hr/unit)	Total Potential Throughput (MMSCF/yr)
Natural Gas Boiler	1	2.70	23.2
Space Heater	1	0.58	5.0
Space Heater	8	0.09	6.2
Space Heater	6	0.10	5.2
Space Heater	2	0.12	2.1
Space Heater	1	0.83	7.1
Space Heater	1	0.12	1.0
Machine 1 Oven	2	0.40	6.9
Machine 2 Oven	4	0.75	25.8
Machine 4 Oven	1	3.00	25.8
Machine 6 Oven	4	0.75	25.8
Total		15.59	133.9

Note:

Units were corrected according to information provided by source on October 24, 2012

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.13	0.51	0.51	0.04	6.69	0.37	5.62

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 emission factor is filterable and condensable PM2.5 combined.

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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.406E-04	8.033E-05	5.021E-03	1.205E-01	2.276E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.347E-05	7.364E-05	9.372E-05	2.544E-05	1.406E-04
	Combined HAPs				
	0.13				

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	8,033	0.2	0.1
Summed Potential Emissions in tons/yr	8,034		
CO2e Total in tons/yr	8,082		

Methodology:

All emission factors are based on normal firing.

MMBTU = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Total Heat Input Capacity = \sum (Heat Input Capacity Each (MMBTU/hr) * Number of Units)

Potential Throughput (MMCF) = Heat Input Capacity Each (MMBTU/hr) * Number of Units * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Significant Permit Revision to a
Federally Enforceable State Operating Permit (FESOP)

Source Description and Location
--

Source Name:	Product Specialties, Inc.
Source Location:	2073 McDonald Avenue, New Albany, Indiana 47150
County:	Floyd
SIC Code:	3081 (Unsupported Plastics Film and Sheet)
Operation Permit No.:	F043-24598-00039
Operation Permit Issuance Date:	May 27, 2008
Significant Permit Revision No.:	043-32326-00039
Permit Reviewer:	Ryan Graunke

On September 18, 2012, the Office of Air Quality (OAQ) has received an application from Product Specialties, Inc. related to a modification to an existing stationary vinyl wall covering manufacturing operation.

Existing Approvals

The source was issued a FESOP Renewal No. 043-24598-00039 on May 27, 2008. The source has since received the following approvals:

- (a) First Significant Permit Revision No. 043-26715-00039 on November 06, 2008;
- (b) First Administrative Amendment No. 043-31212-00039 on January 03, 2012; and
- (c) Second Administrative Amendment No. 043-32207-00039 on September 04, 2012

County Attainment Status

The source is located in Floyd County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, 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 Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Floyd County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X. The 1-hour standard was revoked effective June 15, 2005. Basic nonattainment designation effective federally 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. Floyd 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) **PM2.5**
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8th, 2008, and effective on July 15th 2008. Therefore, direct PM2.5 and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
 Floyd County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Status of the Existing Source

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

This PTE is from FESOP Administrative Amendment No. 043-32207-00039 issued on September 04, 2012.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Storage Silos (EU-01 & EU-02)	41.60	41.60	41.60	--	--	--	--	--	--	--
Plastic film mixing (EU-05)	12.40	12.40	12.40	--	--	--	--	--	--	--
Extruders (EU-06 & 07)	14.82	14.82	14.82	--	--	27.48	--	--	--	--
Rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17)	--	--	--	--	--	<23.0	--	--	<24.00	<9.00
Laminators (EU-12, EU-14, EU-16)	3.00	3.00	3.00	--	--	39.0	--	--	--	--
Laminator (EU-18)	1.92	1.92	1.92	-	-		-	-	-	-
Natural Gas Combustion (Insignificant)	0.14	0.57	0.57	0.04	7.50	0.41	6.30	9,053	0.14	0.13 Hexane

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Other Insignificant activities	0.05	0.05	0.05	--	--	5.50	--	--	0.11	negl.
Total PTE of Entire Source	73.93	74.36	74.36	0.04	7.50	<95.39	6.30	9,053	<24.25	<9.13
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
 These emissions are based upon FESOP Administrative Amendment No. 043-32207-00039 issued on September 4, 2012.
¹Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
²The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is not a major stationary source under Nonattainment New Source Review (326 IAC 2-1.1-5), because PM2.5 is not emitted at a rate of 100 tons per year or more.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the Permittee has accepted limits on HAPs emissions to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Product Specialties, Inc. on September 18, 2012, relating to an installation of a new rotogravure press and laminator. A new set of ovens is also being added for Machine 1 Printer. Product Specialties, Inc. has requested to modify the descriptions of the existing emission units to include the Plant ID names.

The following is a list of the new emission units:

- (a) One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;
- (b) One (1) laminator, identified as Machine 7 Laminator (Nakajima) (EU-20) approved for construction in 2012, with a maximum production rate of 7,884,000 yards of film per year, exhausting to stack S25.

- (c) Two (2) natural gas-fired ovens for Machine 1 Printer (Tinter/Washcoater) (EU-09), each rated at 0.4 MMBtu/hr

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of the Proposed Revisions (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Machine 7 Printer (Nakajima) (EU-19)	--	--	--	--	--	191.8	--	--	27.71	27.71 (Triethylene)
Machine 7 Laminator (Nakajima) (EU-20)	1.97	1.97	1.97	--	--	25.62	--	--	--	--
Machine 1 Ovens	0.01	0.03	0.03	0.00	0.34	0.02	0.29	414.7	0.003	0.003 (Hexane)
Total PTE of Proposed Revision	1.98	2.00	2.00	0.00	0.34	138.5	0.14	414.7	27.72	27.71 (Triethylene)

Pursuant to 326 IAC 2-8-11.1(f)(1)(E) and (G), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves the construction of new emission units with potential to emit greater than or equal to twenty-five (25) tons per year of VOC and ten (10) tons per year of a single HAP (ethylene glycol).

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source (*reflecting adjustment of existing limits*), with updated emissions shown as **bold** values and previous emissions shown as ~~strike through~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Storage Silos (EU-01 & EU-02)	41.60 57	41.60 57	41.60 57	--	--	--	--	--	--	--
Plastic film mixing (EU-05)	12.40 38	12.40 38	12.40 38	--	--	--	--	--	--	--
Extruders (EU-06 & 07)	14.82	14.82	14.82	--	--	27.48	--	--	--	--
Rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, EU-19) ³	--	--	--	--	--	<23.0	--	--	<24.0 0	<9.00 (Triethylene)
Laminators (EU-12, EU-14, EU-16, EU-18 , EU-20) ⁴	3.00	3.00	3.00	--	--	39.0	--	--	--	--
Laminator (EU- 18)	1.92	1.92	1.92	-	-		-	-	-	-
Natural Gas Combustion (Insignificant)	0.14 0.13	0.57 0.51	0.57 0.51	0.04	7.50 6.69	0.41 0.37	6.30 5.62	9,053 8,082	0.14 0.13	0.13 0.12 (Hexane)
Other Insignificant activities	0.05	0.05	0.05	--	--	5.50	--	--	0.11	negl.
Total PTE of Entire Source	73.93 71.94	74.36 72.32	74.36 72.32	0.04	7.50 6.69	<95.3 934	6.30 5.62	9,053 8,082	<24.2 524	<9.13 (Triethylene)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
² The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.
³ As requested by the source, the new rotogravure press (EU-19) has been included in the VOC, single HAP, and combined HAPs cap limits (specified in Conditions D.1.3(c), D.1.4(a), and D.1.4(b) of FESOP Administrative Amendment 043-32207-00039).
⁴ As requested by the source, the new laminator (EU-20) has been included in the existing VOC cap limit (specified in Conditions D.1.3 (e) of FESOP Administrative Amendment 043-32207-00039).

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ¹	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ²	Total HAPs	Worst Single HAP
Storage Silos (EU-01 & EU-02)	41.57	41.57	41.57	--	--	--	--	--	--	--
Plastic film mixing (EU-05)	12.38	12.38	12.38	--	--	--	--	--	--	--
Extruders (EU-06 & 07)	14.82	14.82	14.82	--	--	27.48	--	--	--	--
Rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, EU-19) ³	--	--	--	--	--	23.0	--	--	24.00	9 (Triethylene)
Laminators (EU-12, EU-14, EU-16, EU-18, EU-20) ⁴	3.00	3.00	3.00	--	--	39.0	--	--	--	--
Natural Gas Combustion (Insignificant)	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082	0.13	0.12 (Hexane)
Other Insignificant activities	0.05	0.05	0.05	--	--	5.50	--	--	0.11	negl.
Total PTE of Entire Source	71.94	72.32	72.32	0.04	6.69	95.34	5.62	8,082	24.24	9 (Triethylene)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

¹ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

² The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

³ As requested by the source, the new rotogravure press (EU-19) has been included in the VOC, single HAP, and combined HAPs cap limits (specified in Conditions D.1.3(c), D.1.4(a), and D.1.4(b) of FESOP Administrative Amendment 043-32207-00039).

⁴ As requested by the source, the new laminator (EU-20) has been included in the existing VOC cap limit (specified in Conditions D.1.3 (e) of FESOP Administrative Amendment 043-32207-00039).

(a) FESOP Status

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The total VOC input for the rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 23.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (2) The emission rate from each of the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20) shall not exceed 0.0065 pounds of VOC per yard of film produced.
- (3) The total amount of film processed from the laminators (EU-14, EU-12, EU-16, EU-18, and EU-20) shall not exceed 12,000,000 yards per twelve (12) consecutive month period with compliance determined at the end of each month.
- (4) The total input of a single HAP to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (5) The total input of a combination of HAPs to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19) shall not exceed 24 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Note: The existing VOC and HAP input limits did not change due to this revision, because the source requested that the new rotogravure press (EU-19) and laminator (EU-20) be included in the existing VOC and HAP input limits. This is a Title 1 change.

Compliance with these limits, combined with the potential to emit VOC and HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(b) PSD Minor Source

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the PTE of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) Nonattainment New Source Review

This modification to an existing Nonattainment New Source Review minor stationary source will not change the Nonattainment New Source Review minor status, because the potential to emit of PM_{2.5} from the entire source will continue to be less than the Nonattainment New Source Review major source threshold levels. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ (326 IAC 12), are not included for this proposed revision, since Machine 7 Printer (Nakajima) (EU-19) is not a publication rotogravure printing press as defined in 40 CFR 60.431.
- (b) Machine 7 Printer (Nakajima) (EU-19) is subject to the New Source Performance Standards for Standards of Performance for Flexible Vinyl and Urethane Coating and Printing (40 CFR 60, Subpart FFF), because it is a rotogravure press to print flexible vinyl products as defined in 40 CRF 60.580 and was constructed after January 18, 1983.

The units subject to this rule include the following:

- (1) Machine 7 Printer (Nakajima) (EU-19).

Applicable portions of the NSPS are the following:

- (1) 40 CFR 60.580 (a) and (b)
- (2) 40 CFR 60.581
- (3) 40 CFR 60.582 (a)(1)
- (4) 40 CFR 60.583 (a), (b), and (c)
- (5) 40 CFR 60.585 (a), (b)(1), (c), and (d)

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to Machine 7 Printer (Nakajima) (EU-19), except as otherwise specified in 40 CFR 60, Subpart FFF.

- (c) The requirements of the New Source Performance Standard for Polymeric Coating of Supporting Substrates, 40 CFR 60, Subpart VVV (326 IAC 12), are not included for this proposed revision, since Machine 7 Printer (Nakajima) (EU-19) does not use polymer for the coating purposes.
- (d) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK (326 IAC 20-18), are not included for this proposed revision, since Machine 7 Printer (Nakajima) (EU-19) is not located at a major source of HAPs.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paper and Other Web Coating, 40 CFR 63, Subpart JJJJ (326 IAC 20-65), are not included for this proposed revision, since Machine 7 Printer (Nakajima) (EU-19) are not located at a major source of HAPs.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (c) 326 IAC 2-1.1-5 (Nonattainment New Source Review)
This modification to an existing minor stationary source under 326 IAC 2-1.1-5 (Nonattainment New Source Review) will not change the minor status, because the potential to emit of PM_{2.5} from the entire source will continue to be less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs))
The unlimited potential to emit of HAPs from Machine 7 Printer (Nakajima) (EU-19) is greater than ten (10) tons per year for any single HAP. However, the source has taken FESOP limits for Machine 7 Printer (Nakajima) (EU-19) such that the potential to emit of HAPs from the entire source will be less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the proposed revision is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (f) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) 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.
 - (2) 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.

- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

Machine 7 Printer (Nakajima) (EU-19)

- (a) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Machine 7 Printer (Nakajima) (EU-19) is not subject to the requirements of 326 IAC 8-1-6 because it is subject to the requirements of 326 IAC 8-2-11 (Surface Coating VOC Emission Limitations for Fabric and Vinyl Coating).
- (b) 326 IAC 8-2-11 (Surface Coating VOC Emission Limitations for Fabric and Vinyl Coating)
Machine 7 Printer (Nakajima) (EU-19) is subject to the requirements of 326 IAC 8-2-11 because the construction date for this facility is after July 1, 1990, and it has potential and actual VOC emissions greater than 15 pounds per day. Pursuant to 326 IAC 8-2-11 (b), the VOC emissions from the coating applicators for the printing operations at Machine 7 Printer (Nakajima) (EU-19) shall not exceed 4.8 pounds of VOC per gallon of coating, excluding water.

The worst-case, as-applied coating for VOC emissions for Machine 7 Printer (Nakajima) (EU-19), Penn Matte Yellow, has a VOC content less than 4.8 pounds per gallon of coating, excluding water. Therefore, Machine 7 Printer (Nakajima) (EU-19) can comply with this rule (for details please refer to Appendix A of this TSD).

- (c) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

Machine 7 Laminator (Nakajima) (EU-20)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Particulate emissions are generated from Machine 7 Laminator (Nakajima) (EU-20) due to steam heating and embossing operations at this laminator. The uncontrolled particulate emissions due to the steam heating and embossing operations are greater than 0.551 pounds per hour and particulate emission limit for this facility is not established in any other rules. Therefore, the steam heating and embossing operations at this facility are subject to the requirements of 326 IAC 6-3-2.

The raw material throughput capacity of the steam heating and embossing operations is 900 yards per hour, each, which is equivalent to 0.422 tons per hour (844 pounds/hour), using a conversion factor of 15 ounces per yard of PVC (taken from FESOP 043-15615-00039).

Pursuant to 326 IAC 6-3-2(e), the allowable PM emissions from the steam heating and embossing operations shall not exceed 3.65 pounds per hour when operating at a process weight rate of 0.422 tons per hour. Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 * P^{0.67}$$

Where: E = rate of emission in pounds per hour
P = process weight rate in tons per hour

Based on the emission factor 0.0005 pounds per yard of material (which is derived from the actual stack test data from a similar facility and used in FESOP Renewal No. 043-24598-00039), the actual PM emission rate is 0.45 pounds per hour, which is less than 2.30 pounds per hour. Therefore, the Laminator (EU-18) will be able to comply with 326 IAC 6-3-2.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from Machine 7 Laminator (Nakajima) (EU-20) are greater than 25 tons per year. However, the source has taken a production limit for this laminator such that the limited VOC PTE of this laminator is less than twenty-five (25) tons per year. Therefore, the proposed revision is not subject to the requirements of 326 IAC 8-1-6.

In order to render the requirements of 326 IAC 8-1-6 not applicable, Machine 7 Laminator (Nakajima) (EU-20) shall be limited as follows:

- (1) The production rate of laminator Machine 7 Laminator (Nakajima) (EU-20) shall not exceed 7,661,538 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month.
- (2) The emission rate from Machine 7 Laminator (Nakajima) (EU-20) shall not exceed 0.0065 pounds of VOC per yard of film produced.

$$\text{VOC} = (7,661,538 \text{ yards/yr}) * (0.0065 \text{ lb/yr}) * (1 \text{ ton}/2000 \text{ lbs}) = 24.9 \text{ tons/yr}$$

Compliance with these limits will restrict the VOC PTE of Machine 7 Laminator (Nakajima) (EU-20) to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

Compliance Determination, Monitoring and Testing Requirements

The existing compliance requirements will not change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: No. 043-24598-00039 on May 27, 2008.

Proposed Changes

- (a) The following changes to the permit are made due to the proposed revision.
- (1) Section A.2 and D.1 have been revised to include Machine 7 Printer (Nakajima) (EU-19) and Machine 7 Laminator (Nakajima) (EU-20).
 - (2) The emission limitations and standards and recordkeeping and reporting requirements in Section D.1 have been revised due to the addition of new emission units.
 - (3) FESOP Quarterly Report forms have been revised to include new emission units.
 - (4) Emission unit description has been revised in Sections A.2, A.3, D.1, and D.2 to include Plant ID names of each emissions unit and to correct the existing emission units as requested by the source.
 - (5) The two (2) 0.75 MMBtu/hr natural gas-fired indirect heaters (formerly A.3(a)(3)) and the two (2) 0.304 MMBtu/hr natural gas-fired heaters (formerly A.3(a)(4)) no longer exist at the source, and the 1.00 MMBtu/hr natural gas-fired oven (formerly A.3(a)(9)) was never installed at the source. A set of ovens for Machine 1 Printer (Tinter/Washcoater) (EU-09) has been added in A.3(a)(8). Existing natural gas-fired ovens have been more clearly described and reorganized in the list of emission units.
 - (6) The maximum usage of each laminator has been corrected to 900 yards per hour. The corresponding process throughout and particulate matter emission limits in Condition D.1.1 have been changed to reflect the correct usage. Description of laminators in sections A.2 and D.1 have also been revised accordingly.

- (7) Calculations in Appendix A have been updated to reflect correct line speeds and updated worst-case scenario ink for all printers. This does not require any changes to the permit.
- (b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit.
 - (1) Condition D.1.1 has been revised to remove language included in Condition D.1.3.
 - (2) Typographical error corrected in Condition D.1.11
 - (3) Reference to 40 CFR 63 Subpart FFF has been corrected to 40 CFR 60 Subpart FFF in Sections A.2 and D.1.
 - (4) Section E had been created to include NSPS Conditions (Former conditions D.1.12 and D.1.13). Description of 40 CFR 60 Subpart FFF has been moved to Attachment A.

Changes listed in (a) and (b) above are shown below. Deleted language appears as ~~striketrough~~ text and new language appears as **bold** text.

...

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

...

- (d) Two (2) extrusion units, identified as **Extruder #1 (EU-06)** and **Extruder #2 (EU-07)**, each having a ~~limited~~ **maximum** throughput of 1,020 pounds per hour, exhausting to stacks S4 and S5, **respectively**;
- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as **Machine 1 Printer (Tinter/Washcoater) (EU-09)**, with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 2 Printer (Profama) (EU-11)**, with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 3 Printer (Magnat) (EU-13)**, with a maximum coverage of 14.4 pounds of ink per million in² of PVC sheet vinyl per head (lb/million in²/head), exhausting to stack S12 and S13;
- ~~(h)~~ **(h)** One (1) rotogravure press with six (6) color printing heads, identified as **Machine 4 Printer (W&H3) (EU-15)**, with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S15;
- ~~(i)~~ **(i)** One (1) rotogravure press with four (4) color printing heads, identified as **Machine 6 Printer (W&H6) (EU-17)**, installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S18;
- (j) One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack**

S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;

- ~~(h)~~ **(k)** ~~Three (3)~~ **One (1)** laminators, identified as **Machine 2 Laminator (Profama)** (EU-16, EU-14 and EU-12), each having ~~with a limited maximum~~ production rate of 4,000,000 **7,884,000**, yds ~~yards of~~ laminated film/ ~~per~~ year, exhausting to stacks ~~S16, S14 and S8,~~ respectively; ~~and~~
- ~~(h)~~ **(l)** ~~Three (3)~~ **One (1)** laminators, identified as **Machine 3 Laminator (Magnat)** (EU-16, EU-14 and EU-12), each having ~~with a limited maximum~~ production rate of 4,000,000 **7,884,000**, yds ~~yards of~~ laminated film/ ~~per~~ year, exhausting to stacks ~~S16, S14 and S8,~~ respectively; ~~and~~
- ~~(h)~~ **(m)** ~~Three (3)~~ **One (1)** laminators, identified as **Machine 4 Laminator (W&H3)** (EU-16, EU-14 and EU-12), each having ~~with a limited maximum~~ production rate of 4,000,000 **7,884,000**, yds ~~yards of~~ laminated film/ ~~per~~ year, exhausting to stacks ~~S16, S14 and S8,~~ respectively; ~~and~~
- ~~(k)~~**(n)** One (1) laminator, identified as **Machine 6 Laminator (W&H6)** (EU-18), installed in 2008, ~~having with a maximum~~ production rate of ~~15,768,000~~ **7,884,000** yards of laminated film per year, exhausting to stack ~~S4920;~~ and
- (o)** **One (1) laminator, identified as Machine 7 Laminator (Nakajima) (EU-20), approved for construction in 2012, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S25.**

Pursuant to 40 CFR 630, Subpart FFF, the emission units EU-09, EU-11, EU-15, ~~and~~ EU-17, and **EU-19** above are considered affected facilities.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(l)]

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a)** Natural gas fired combustion sources with the heat input equal to or less than ten (10) million Btu per hour:
 - (1)** One (1) natural gas-fired boiler rated at 2.7 MMBtu/hr [326 IAC 6-2-4];
 - ~~(3)~~ ~~Two (2) natural gas-fired indirect heaters rated at 0.75 MMBtu/hr each [326 IAC 6-2-4];~~
 - ~~(4)~~ ~~Two (2) natural gas-fired dryers rated at 0.304 MMBtu/hr each;~~
 - ~~(5)~~**(2)** One (1) natural gas-fired space heater rated at 0.58 MMBtu/hr;
 - ~~(6)~~**(3)** Eight (8) natural gas-fired space heaters rated at 0.09 MMBtu/hr each;
 - ~~(7)~~**(4)** Six (6) natural gas-fired space heaters rated at 0.1 MMBtu/hr each;
 - ~~(9)~~ ~~One (1) natural gas-fired oven rated at 1.00 MMBtu/hr, EU-17;~~
 - ~~(10)~~**(5)** Two (2) natural gas-fired space heaters rated at 0.12 MMBtu/hr each;
 - ~~(11)~~**(6)** One (1) natural gas-fired space heater rated at 0.83 MMBtu/hr; ~~and~~
 - ~~(12)~~**(7)** One (1) natural gas-fired space heater rated at 0.12 MMBtu/hr-;

- (8) Two (2) natural gas-fired ovens for Machine 1 Printer (Tinter/Washcoater) (EU-09) each rated at 0.4 MMBtu/hr;**
- ~~(2)~~**(9) One (1) Four (4) natural gas-fired ovens for Machine 2 Printer (Profama) (EU-11) with four (4) each rate at 0.75 MMBtu/hr burners for EU-11;**
- ~~(4)~~**(10) One (1) natural gas-fired oven for Machine 4 Printer (Magnat) (EU-15) rated at 3.00 MMBtu/hr; and**
- ~~(8)~~**(11) One (1) Four (4) natural gas-fired drying ovens for Machine 6 Printer (W&H6) (EU-17), each rated at 20.75 MMBtu/hr, installed in 2008.**

...

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Vinyl Wall Covering Manufacturing Operation

...

- (d) Two (2) extrusion units, identified as **Extruder #1 (EU-06)** and **Extruder #2 (EU-07)**, each having a ~~limited maximum~~ throughput of 1,020 pounds per hour, exhausting to stacks S4 and S5, **respectively**;
- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as **Machine 1 Printer (Tinter/Washcoater) (EU-09)**, with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 2 Printer (Profama) (EU-11)**, with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 3 Printer (Magnat) (EU-13)**, with a maximum coverage of 14.4 pounds of ink per million in² of PVC sheet vinyl per head (lb/million in²/head), exhausting to stack S12 and S13;
- ~~(h)~~(h) One (1) rotogravure press with six (6) color printing heads, identified as **Machine 4 Printer (W&H3) (EU-15)**, with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S15;
- ~~(h)~~(i) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 6 Printer (W&H6) (EU-17)**, installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S18;
- (j) **One (1) rotogravure press with six (6) color printing heads, identified as Machine 7 Printer (Nakajima) (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;**
- ~~(h)~~ (k) ~~Three (3) One (1) laminators, identified as Machine 2 Laminator (Profama) (EU-16, EU-14 and EU-12), each having with a limited maximum production rate of 4,000,000~~ **7,884,000 yds yards of laminated film/ per year, exhausting to stacks S16, S14 and S8, respectively; and**
- ~~(h)~~ (l) ~~Three (3) One (1) laminators, identified as Machine 3 Laminator (Magnat) (EU-16, EU-14 and EU-12), each having with a limited maximum production rate of 4,000,000~~ **7,884,000 yds yards of laminated film/ per year, exhausting to stacks S16, S14 and S8, respectively; and**
- ~~(h)~~ (m) ~~Three (3) One (1) laminators, identified as Machine 4 Laminator (W&H3) (EU-16, EU-14 and EU-12), each having with a limited maximum production rate of 4,000,000~~ **7,884,000 yds yards of laminated film/ per year, exhausting to stacks S16, S14 and S8, respectively; and**
- ~~(k)~~(n) One (1) laminator, identified as **Machine 6 Laminator (W&H6) (EU-18)**, installed in

2008, ~~having~~ **with** a maximum production rate of ~~15,768,000~~ **7,884,000** yards of laminated film per year, exhausting to stack S4920; and

(o) **One (1) laminator, identified as Machine 7 Laminator (Nakajima) (EU-20), approved for construction in 2012, with a maximum production rate of 7,884,000 yards of laminated film per year, exhausting to stack S25.**

Pursuant to 40 CFR 630, Subpart FFF, the emission units EU-09, EU-11, EU-15, ~~and~~ EU-17, **and EU-19** above are considered affected facilities.

...

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the storage silos (EU-01 & EU-02), the mixing operation (EU-05), the extrusion units (EU-06 & EU-07), and the laminating lines (EU-14, EU-12, EU-16, and EU-18) shall not exceed the following allowable PM emissions when operating at a process weight rate as shown in the table below:

Process Facility	Stack ID	Process Throughput (tons/hr)	Allowable PM Emissions (lbs/hr)
Resin Powder Storage Silo (EU-01)	V1	0.44	2.37
CaCO ₃ Storage Silo (EU-02)	V2	0.29	1.79
Plastic Film Mixing Line (EU-05)	V3	0.794	3.52
Extrusion Unit (EU-06)	S4	0.36	2.07
Extrusion Unit (EU-07)	S5	0.36	2.07
Laminator (EU-14)	S14	0.8440.442 0.442	3.662.30 2.30
Laminator (EU-12)	S8	0.8440.442 0.442	3.662.30 2.30
Laminator (EU-16)	S16	0.8440.442 0.442	3.662.30 2.30
Laminator (EU-18)	S19	0.8440.442 0.442	3.662.30 2.30
Laminator (EU-20)	S25	0.442	2.30

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and } P = \text{process weight rate in tons per hour}$$

(d) ~~The emission rate from each of the laminators (EU-14, EU-12, EU-16, and EU-18) shall not exceed 0.0065 pounds of VOC per yard of film processed.~~

(e) ~~The total amount of film processed from the laminators (EU-14, EU-12, EU-16, and EU-18) shall not exceed 12,000,000 yards per twelve (12) consecutive month period with compliance determined at the end of each month.~~

~~Compliance with the limits in (a) through (c) above in conjunction with the VOC potential emissions from the insignificant activities at the source will limit the source-wide VOC PTE to less than 100 tons per twelve (12) consecutive month period and therefore, render the requirements of 326 IAC 2-7 (Part 70 rules) and 326 IAC 2-2 (PSD) not applicable.~~

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-11]

Pursuant to 326 IAC 8-2-11 (Fabric and Vinyl Coating VOC Limitations), the VOC content of the coatings used in the rotogravure presses EU-09, EU-11, EU-13, EU-15, ~~and EU-17~~, **and EU-19** to completely saturate the substrate shall be limited to 4.8 pounds of VOC per gallon of coating less water delivered to the applicator.

D.1.3 Volatile Organic Compounds [326 IAC 2-8]

Pursuant to 326 IAC 2-8:

...

- (c) The total VOC input for the rotogravure presses (identified as EU-09, EU-11, EU-13, EU-15, ~~and EU-17~~, **and EU-19**) shall not exceed 23.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) The emission rate from each of the laminators (EU-14, EU-12, EU-16, ~~and EU-18~~, **and EU-20**) shall not exceed 0.0065 pounds of VOC per yard of film processed.
- (e) The total amount of film processed from the laminators (EU-14, EU-12, EU-16, ~~and EU-18~~, **and EU-20**) shall not exceed 12,000,000 yards per twelve (12) consecutive month period with compliance determined at the end of each month.

...

D.1.4 Hazardous Air Pollutants (HAPs) [326 IAC 2-8]

Pursuant to 326 IAC 2-8:

- (a) The total input of a single HAP to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, ~~and EU-17~~, **and EU-19**) shall not exceed 9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The total input of a combination of HAPs to the rotogravure presses (EU-09, EU-11, EU-13, EU-15, ~~and EU-17~~, **and EU-19**) shall not exceed 24 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

...

D.1.5 Volatile Organic Compounds [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the amount of film processed from each of the laminators (EU-14, EU-12, EU-16, ~~and EU-18~~, **and EU-20**) shall not exceed 7,661,538 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit in conjunction with the VOC emission limit specified in Condition D.1.3(d) will limit the VOC emission to less than 25 tons per year from each of these facilities, and therefore render the requirements of 326 IAC 8-1-6 not applicable to the laminators (EU-14, EU-12, EU-16, ~~and EU-18~~, **and EU-20**).

...

D.1.11 Broken or Failed Bag Detection

...

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the **failed unit** shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency.

...

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.12 Record Keeping Requirement

- ...
- (e) To document the compliance status with Condition D.1.3(e), the Permittee shall maintain records of the total film processed by all the laminators (identified as EU-12, EU-14, EU-16, and EU-18, and **EU-20**) per month.
- (f) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of the total film processed by each of the laminators (identified as EU-12, EU-14, EU-16, and EU-18, and **EU-20**) per month.
- ...
- ...

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

~~D.1.14 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]~~

~~The provisions of 40 CFR Part 60, Subpart A—General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to printing operations EU-09, EU-11, EU-15, EU-17, and EU-19 except when otherwise specified in 40 CFR Part 60, Subpart FFF.~~

~~D.1.15 NSPS Subpart FFF Requirements [326 IAC 12] [40 CFR 60, Subpart FFF]~~

~~Pursuant to 40 CFR 60, Subpart FFF, the Permittee shall comply with the provisions of 40 CFR 60.580 for the printing operations EU-09, EU-11, EU-15, EU-17, and EU-20, as specified as follows:~~

~~§ 60.580—Applicability and designation of affected facility.~~

~~(a) The affected facility to which the provisions of this subpart apply is each rotogravure printing line used to print or coat flexible vinyl or urethane products.~~

~~(b) This subpart applies to any affected facility which begins construction, modification, or reconstruction after January 18, 1983.~~

~~(c) For facilities controlled by a solvent recovery emission control device, the provisions of §60.584(a) requiring monitoring of operations will not apply until EPA has promulgated performance specifications under appendix B for the continuous monitoring system. After the promulgation of performance specifications, these provisions will apply to each affected facility under paragraph (b) of this section. Facilities controlled by a solvent recovery emission control device that become subject to the standard prior to promulgation of performance specifications must conduct performance tests in accordance with §60.13(b) after performance specifications are promulgated.~~

~~§ 60.581—Definitions and symbols.~~

~~(a) All terms used in this subpart, not defined below, are given the same meaning as in the Act or in subpart A of this part.~~

~~*Emission control device* means any solvent recovery or solvent destruction device used to control volatile organic compounds (VOC) emissions from flexible vinyl and urethane rotogravure printing lines.~~

~~*Emission control system* means the combination of an emission control device and a vapor capture system for the purpose of reducing VOC emissions from flexible vinyl and urethane rotogravure printing lines.~~

~~*Flexible vinyl and urethane products* mean those products, except for resilient floor coverings (1977 Standard Industry Code 3996) and flexible packaging, that are more than 50 micrometers (0.002 inches) thick, and that consist of or contain a vinyl or urethane sheet or a vinyl or urethane coated web.~~

~~*Gravure cylinder* means a plated cylinder with a printing image consisting of minute cells or indentations, specifically engraved or etched into the cylinder's surface to hold ink when continuously revolved through a fountain of ink.~~

~~*Ink* means any mixture of ink, coating solids, organic solvents including dilution solvent, and water that is applied to the web of flexible vinyl or urethane on a rotogravure printing line.~~

~~Ink solids~~ means the solids content of an ink as determined by Method 24, ink manufacturer's formulation data, or plant blending records.

~~Inventory system~~ means a method of physically accounting for the quantity of ink, solvent, and solids used at one or more affected facilities during a time period. The system is based on plant purchase or inventory records.

~~Plant blending records~~ means those records which document the weight fraction of organic solvents and solids used in the formulation or preparation of inks at the vinyl or urethane printing plant where they are used.

~~Rotogravure print station~~ means any device designed to print or coat inks on one side of a continuous web or substrate using the intaglio printing process with a gravure cylinder.

~~Rotogravure printing line~~ means any number of rotogravure print stations and associated dryers capable of printing or coating simultaneously on the same continuous vinyl or urethane web or substrate, which is fed from a continuous roll.

~~Vapor capture system~~ means any device or combination of devices designed to contain, collect, and route organic solvent vapors emitted from the flexible vinyl or urethane rotogravure printing line.

(b) All symbols used in this subpart not defined below are given the same meaning as in the Act or in subpart A of this part.

~~a~~=the gas stream vents exiting the emission control device.

~~b~~=the gas stream vents entering the emission control device.

~~f~~=the gas stream vents which are not directed to an emission control device.

~~C_{aj}~~=the concentration of VOC in each gas stream (j) for the time period exiting the emission control device, in parts per million by volume.

~~C_{bi}~~=the concentration of VOC in each gas stream (i) for the time period entering the emission control device, in parts per million by volume.

~~C_{fk}~~=the concentration of VOC in each gas stream (k) for the time period which is not directed to an emission control device, in parts per million by volume.

~~G~~=the weighted average mass of VOC per mass of ink solids applied, in kilograms per kilogram.

~~M_{ei}~~=the total mass of each ink (i) applied in the time period as determined from plant records, in kilograms.

~~M_{dj}~~=the total mass of each dilution solvent (j) added at the print line in the time period determined from plant records, in kilograms.

~~Q_{aj}~~=the volumetric flow rate of each effluent gas stream (j) exiting the emission control device, in standard cubic meters per hour.

~~Q_{bi}~~=the volumetric flow rate of each effluent gas stream (i) entering the emission control device, in standard cubic meters per hour.

~~Q_{fk}~~=the volumetric flow rate of each effluent gas stream (k) not directed to an emission control device, in standard cubic meters per hour.

~~E~~=the VOC emission reduction efficiency (as a fraction) of the emission control device during performance testing.

~~F~~=the VOC emission capture efficiency (as a fraction) of the vapor capture system during performance testing.

~~W_{ei}~~=the weight fraction of VOC in each ink (i) used in the time period as determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{si} means the weight fraction of solids in each ink (i) used in the time period as determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

W_{vj} means the weight fraction of VOC in each dilution solvent (j) added at the print line in the time period determined from Method 24, manufacturer's formulation data, or plant blending records, in kilograms per kilogram.

§ 60.582—Standard for volatile organic compounds.

(a) On and after the date on which the performance test required by §60.8 has been completed, each owner or operator subject to this subpart shall either:

(1) Use inks with a weighted average VOC content less than 1.0 kilogram VOC per kilogram ink solids at each affected facility, or

(2) Reduce VOC emissions to the atmosphere by 85 percent from each affected facility.

§ 60.583—Test methods and procedures.

(a) Methods in appendix A of this part, except as provided under §60.8(b), shall be used to determine compliance with §60.582(a) as follows:

(1) Method 24 for analysis of inks. If nonphotochemically reactive solvents are used in the inks, standard gas chromatographic techniques may be used to identify and quantify these solvents. The results of Method 24 may be adjusted to subtract these solvents from the measured VOC content.

(2) Method 25A for VOC concentration (the calibration gas shall be propane);

(3) Method 1 for sample and velocity traverses;

(4) Method 2 for velocity and volumetric flow rates;

(5) Method 3 for gas analysis;

(6) Method 4 for stack gas moisture.

(b) To demonstrate compliance with §60.582(a)(1), the owner or operator of an affected facility shall determine the weighted average VOC content of the inks according to the following procedures:

(1) Determine and record the VOC content and amount of each ink used at the print head, including the VOC content and amount of diluent solvent, for any time periods when VOC emission control equipment is not used.

(2) Compute the weighted average VOC content by the following equation:

$$C = \frac{\sum_{i=1}^n (W_{oi} M_{ci}) + \sum_{j=1}^m (W_{oj} M_{dj})}{\sum_{i=1}^n (M_{ci} W_{si})}$$

(3) The weighted average VOC content of the inks shall be calculated over a period that does not exceed one calendar month, or four consecutive weeks. A facility that uses an accounting system based on quarters consisting of two 28 calendar day periods and one 35 calendar day period may use an averaging period of 35 calendar days four times per year, provided the use of such an accounting system is documented in the initial performance test.

(4) Each determination of the weighted average VOC content shall constitute a performance test for any period when VOC emission control equipment is not used. Results of the initial performance test must be reported to the Administrator. Method 24 or ink manufacturers' formulation data along with plant blending records (if plant blending is done) may be used to determine VOC content. The Administrator may require the use of Method 24 if there is a question concerning the accuracy of the ink manufacturer's data or plant blending records.

(5) If, during the time periods when emission control equipment is not used, all inks used contain less than 1.0 kilogram VOC per kilogram ink solids, the owner or operator is not required to calculate the weighted average VOC content, but must verify and record the VOC content of each ink (including any added dilution solvent) used as determined by Method 24, ink manufacturers' formulation data, or plant blending records.

~~(c) To demonstrate compliance with §60.582(a)(1), the owner or operator may determine the weighted average VOC content using an inventory system.~~

~~(1) The inventory system shall accurately account to the nearest kilogram for the VOC content of all inks and dilution solvent used, recycled, and discarded for each affected facility during the averaging period. Separate records must be kept for each affected facility.~~

~~(2) To determine VOC content of inks and dilution solvent used or recycled, Method 24 or ink manufacturers' formulation data must be used in combination with plant blending records (if plant blending is done) or inventory records or purchase records for new inks or dilution solvent.~~

~~(3) For inks to be discarded, only Method 24 shall be used to determine the VOC content. Inks to be discarded may be combined prior to measurement of volume or weight and testing by Method 24.~~

~~(4) The Administrator may require the use of Method 24 if there is a question concerning the accuracy of the ink manufacturer's data or plant records.~~

~~(5) The Administrator shall approve the inventory system of accounting for VOC content prior to the initial performance test.~~

~~(d) To demonstrate compliance with §60.582(a)(2), the owner or operator of an affected facility controlled by a solvent recovery emission control device or an incineration control device shall conduct a performance test to determine overall VOC emission control efficiency according to the following procedures:~~

~~(1) The performance test shall consist of three runs. Each test run must last a minimum of 30 minutes and shall continue until the printing operation is interrupted or until 180 minutes of continuous operation occurs. During each test run, the print line shall be printing continuously and operating normally. The VOC emission reduction efficiency achieved for each test run is averaged over the entire test run period.~~

~~(2) VOC concentration values at each site shall be measured simultaneously.~~

~~(3) The volumetric flow rate shall be determined from one Method 2 measurement for each test run conducted immediately prior to, during, or after that test run. Volumetric flow rates at each site do not need to be measured simultaneously.~~

~~(4) In order to determine capture efficiency from an affected facility, all fugitive VOC emissions from the affected facility shall be captured and vented through stacks suitable for measurement. During a performance test, the owner or operator of an affected facility located in an area with other sources of VOC shall isolate the affected facility from other sources of VOC. These two requirements shall be accomplished using one of the following methods:~~

~~(i) Build a permanent enclosure around the affected facility;~~

~~(ii) Build a temporary enclosure around the affected facility and duplicate, to an extent that is reasonably feasible, the ventilation conditions that are in effect when the affected facility is not enclosed (one way to do this is to divide the room exhaust rate by the volume of the room and then duplicate that quotient or 20 air changes per hour, whichever is smaller, in the temporary enclosure); or~~

~~(iii) Shut down all other sources of VOC and continue to exhaust fugitive emissions from the affected facility through any building ventilation system and other room exhausts such as print line ovens and embossers.~~

~~(5) For each affected facility, compliance with §60.582(a)(2) has been demonstrated if the average value of the overall control efficiency (EF) for the three runs is equal to or greater than 85 percent. An overall control efficiency is calculated for each run as follows:~~

~~(i) For efficiency of the emission control device,~~

$$EF = \frac{\sum_{i=1}^n (Q_{di} C_{di}) - \sum_{j=1}^m (Q_{dj} C_{dj})}{\sum_{i=1}^n (Q_{di} C_{di})}$$

(ii) For efficiency of the vapor capture system,

$$F = \frac{\sum_{i=1}^n (Q_{bi} C_{bi})}{\sum_{i=1}^n (Q_{bi} C_{bi}) + \sum_{k=1}^p (Q_{fk} C_{fk})}$$

§ 60.584—Monitoring of operations and recordkeeping requirements.

(a) The owner or operator of an affected facility controlled by a solvent recovery emission control device shall install, calibrate, operate, and maintain a monitoring system which continuously measures and records the VOC concentration of the exhaust vent stream from the control device and shall comply with the following requirements:

(1) The continuous monitoring system shall be installed in a location that is representative of the VOC concentration in the exhaust vent, at least two equivalent stack diameters from the exhaust point, and protected from interferences due to wind, weather, or other processes.

(2) During the performance test, the owner or operator shall determine and record the average exhaust vent VOC concentration in parts per million by volume. After the performance test, the owner or operator shall determine and, in addition to the record made by the continuous monitoring device, record the average exhaust vent VOC concentration for each 3-hour clock period of printing operation when the average concentration is greater than 50 ppm and more than 20 percent greater than the average concentration value demonstrated during the most recent performance test.

(b) The owner or operator of an affected facility controlled by a thermal incineration emission control device shall install, calibrate, operate, and maintain a monitoring device that continuously measures and records the temperature of the control device exhaust gases and shall comply with the following requirements:

(1) The continuous monitoring device shall be calibrated annually and have an accuracy of ± 0.75 percent of the temperature being measured, expressed in degrees Celsius, or ± 2.5 °C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average temperature of the control device exhaust gases. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average temperature for each 3-hour clock period of printing operation when the average temperature of the exhaust gases is more than 28 °C (50 °F) below the average temperature demonstrated during the most recent performance test.

(c) The owner or operator of an affected facility controlled by a catalytic incineration emission control device shall install, calibrate, operate, and maintain monitoring devices that continuously measure and record the gas temperatures both upstream and downstream of the catalyst bed and shall comply with the following requirements:

(1) Each continuous monitoring device shall be calibrated annually and have an accuracy of ± 0.75 percent of the temperature being measured, expressed in degrees Celsius, or ± 2.5 °C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average gas temperature both upstream and downstream of the catalyst bed. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average temperatures for each 3-hour clock period of printing operation when the average temperature of the gas stream before the catalyst bed is more than 28 °C below the average temperature demonstrated during the most recent performance test or the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test.

(d) The owner or operator of an affected facility shall record time periods of operation when an emission control device is not in use.

§ 60.585—Reporting requirements.

(a) For all affected facilities subject to compliance with §60.582, the performance test data and results from the performance test shall be submitted to the Administrator as specified in §60.8(a).

(b) The owner or operator of each affected facility shall submit semiannual reports to the Administrator of occurrences of the following:

(1) Exceedances of the weighted average VOC content specified in §60.582(a)(1);

- ~~(2) Exceedances of the average value of the exhaust vent VOC concentration as defined under §60.584(a)(2);~~
- ~~(3) Drops in the incinerator temperature as defined under §60.584(b)(2); and~~
- ~~(4) Drops in the average temperature of the gas stream immediately before the catalyst bed or drops in the average temperature across the catalyst bed as defined under §60.584(c)(2).~~
- ~~(c) The reports required under paragraph (b) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.~~
- ~~(d) The requirements of this subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with requirements established by the State....~~

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

- (a) Natural gas fired combustion sources with the heat input equal to or less than ten (10) million BTU per hour:
- (1) One (1) natural gas-fired boiler rated at 2.7 MMBtu/hr [326 IAC 6-2-4];
 - ~~(3) Two (2) natural gas-fired indirect heaters rated at 0.75 MMBtu/hr each [326 IAC 6-2-4];~~
 - ~~(4) Two (2) natural gas-fired dryers rated at 0.304 MMBtu/hr each;~~
 - ~~(5)(2) One (1) natural gas-fired space heater rated at 0.58 MMBtu/hr;~~
 - ~~(6)(3) Eight (8) natural gas-fired space heaters rated at 0.09 MMBtu/hr each;~~
 - ~~(7)(4) Six (6) natural gas-fired space heaters rated at 0.1 MMBtu/hr each;~~
 - ~~(9)(5) Two (2) natural gas-fired space heaters rated at 0.12 MMBtu/hr each;~~
 - ~~(10)(6) One (1) natural gas-fired space heater rated at 0.83 MMBtu/hr; and~~
 - ~~(11)(7) One (1) natural gas-fired space heater rated at 0.12 MMBtu/hr;~~
 - (8) Two (2) natural gas-fired ovens for Machine 1 Printer (Tinter/Washcoater) (EU-19) each rated at 0.4 MMBtu/hr;**
 - ~~(2)(9) One (1) **Four (4) natural gas-fired ovens for Machine 2 Printer (Profama) (EU-11) with four (4) each rate at 0.75 MMBtu/hr burners for EU-11;**~~
 - ~~(10)(10) One (1) natural gas-fired oven for **Machine 4 Printer (Magnat) (EU-15) rated at 3.00 MMBtu/hr; and**~~
 - ~~(8)(11) One (1) **Four (4) natural gas-fired drying ovens for Machine 6 Printer (W&H6) (EU-17), each rated at 20.75 MMBtu/hr, installed in 2008.**~~
- ...
- ~~(k) One (1) natural gas-fired oven for EU-15 rated at 3.00 MMBtu/hr.~~

(l) One (1) natural gas-fired oven for EU-17 rated at 1.00 MMBtu/hr.

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

...

SECTION E.1 EMISSIONS UNIT CONDITIONS

Emissions Unit Description: Rotogravure Presses

- (e) One (1) rotogravure press with two (2) color printing heads (only one head can be used at a time), identified as **Machine 1 Printer (Tinter/Washcoater)** (EU-09), with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 2 Printer (Profama)** (EU-11), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 3 Printer (Magnat)** (EU-13), with a maximum coverage of 14.4 pounds of ink per million in² of PVC sheet vinyl per head (lb/million in²/head), exhausting to stack S12 and S13;
- (h) One (1) rotogravure press with six (6) color printing heads, identified as **Machine 4 Printer (W&H3)** (EU-15), with a maximum coverage of 14.4 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S15;
- (i) One (1) rotogravure press with four (4) color printing heads, identified as **Machine 6 Printer (W&H6)** (EU-17), installed in 2008, with a maximum coverage of 14.47 pounds of ink per million square inches of PVC sheet per head (lb/million in²/head), exhausting to stack S18;
- (j) One (1) rotogravure press with six (6) color printing heads, identified as **Machine 7 Printer (Nakajima)** (EU-19), approved for construction in 2012, with a maximum line speed of 90 feet per minute, maximum width of 57 inches, and a laydown rate of 1.622 gallons per million square inches of PVC sheet per head, exhausting to stack S21. This unit includes an electric drying oven exhausting to stacks S22, S23, and S24;

Pursuant to 40 CFR 60, Subpart FFF, the emission units EU-09, EU-11, EU-15, EU-17, and EU-19 above are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 12]

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

- (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 facilities described in this section except as otherwise specified in CFR

Part 60, Subpart FFF.

- (b) Pursuant to 40 CFR 60.1, the Permittee shall submit all required notifications and reports to:**

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

**E.1.2 Standards of Performance for Flexible Vinyl and Urethane Coating and Printing
[40 CFR Part 60, Subpart FFF] [326 IAC 12]**

- (a) Pursuant to 40 CFR Part 60, Subpart FFF, the Permittee shall comply with the provisions of Standards of Performance for Flexible Vinyl and Urethane Coating and Printing (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12 for the rotogravure printers as specified as follows:**
- (1) 40 CFR 60.580 (a) and (b)**
 - (2) 40 CFR 60.581**
 - (3) 40 CFR 60.582(a)(1)**
 - (4) 40 CFR 60.583 (a), (b), and (c)**
 - (5) 40 CFR 60.585 (a), (b)(1), (c), and (d)**

...

FESOP Quarterly Report

...

Facility: Laminators EU-142, EU-124, EU-16, ~~and~~ EU-18, **and EU-20**
 Parameter: Film Produced
 Limit: 7,661,538 yards of film processed from each of the laminators (EU-142, EU-124, EU-16, ~~and~~ EU-18, **and EU-20**) per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

	Column 1					Column 2					Column 1 + Column 2				
	This Month					Previous 11 Months					12 Month Total				
	EU-12	EU-14	EU-16	EU-18	EU-20	EU-12	EU-14	EU-16	EU-18	EU-20	EU-12	EU-14	EU-16	EU-18	EU-20
Month 1															
Month 2															
Month 3															

...

FESOP Quarterly Report

...

Facility: Printing Presses: EU-09, EU-11, EU-13, EU-15, ~~and~~ EU-17, **and EU-19**
 Parameter: Total VOC Input

...

...

FESOP Quarterly Report

...

Facility: Printing Presses: EU-09, EU-11, EU-13, EU-15, ~~and~~ EU-17, **and EU-19**
 Parameter: Total Single HAP Input

...

...

FESOP Quarterly Report

...

Facility: Printing Presses: EU-09, EU-11, EU-13, ~~and~~ EU-17, **and EU-19**
 Parameter: Combination of HAPs Input

...

...

FESOP Quarterly Report

...

Facility: Laminators (EU-14, EU-12, EU-16, ~~and~~ EU-18, **and EU-20**)
 Parameter: Total Film Produced from Laminators (EU-14, EU-12, EU-16, ~~and~~ EU-18, **and EU-20**)

...

Conclusion and Recommendation

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

An application for the purposes of this review was received on September 18, 2012. Additional information was received on October 24, 2012.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 043-32326-00039. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ryan Graunke at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (b) A copy of the findings is available on the Internet at: www.in.gov/idem/permits/air/pending.html.
- (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.in.gov/idem/permits/guide/.

**Appendix A: Emission Calculations
Emission Summary**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Unlimited Potential Emissions (tons/year)												
Plant ID	Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	total HAPs	worst case single HAP	
Resin Silo	EU-01	25.05	25.05	25.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaCO ₃ Silo	EU-02	16.51	16.51	16.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastic Mixing	EU-05	12.38	12.38	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extruder #1	EU-06	10.36	10.36	10.36	0.00	0.00	19.21	0.00	0.00	0.00	0.00	0.00
Extruder #2	EU-07	10.36	10.36	10.36	0.00	0.00	19.21	0.00	0.00	0.00	0.00	0.00
Machine 1 Printer (Tinter/Washcoater)	EU-09	0.00	0.00	0.00	0.00	0.00	13.43	0.00	0.00	1.94	1.94	Triethylene
Machine 2 Printer (Profama)	EU-11	0.00	0.00	0.00	0.00	0.00	64.48	0.00	0.00	9.32	9.32	Triethylene
Machine 3 Printer (Magnat)	EU-13	0.00	0.00	0.00	0.00	0.00	64.48	0.00	0.00	9.32	9.32	Triethylene
Machine 4 Printer (W & H3)	EU-15	0.00	0.00	0.00	0.00	0.00	193.45	0.00	0.00	27.96	27.96	Triethylene
Machine 6 Printer (W & H6)	EU-17	0.00	0.00	0.00	0.00	0.00	64.80	0.00	0.00	9.36	9.36	Triethylene
Machine 7 Printer (Nakajima) - New	EU-19	0.00	0.00	0.00	0.00	0.00	191.75	0.00	0.00	27.71	27.71	Triethylene
Machine 2 Laminator (Profama)	EU-12	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00	0.00
Machine 3 Laminator (Magnat)	EU-14	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00	0.00
Machine 4 Laminator (W & H3)	EU-16	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00	0.00
Machine 6 Laminator (W & H6)	EU-18	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00	0.00
Machine 7 Laminator (Nakajima) - New	EU-20	1.97	1.97	1.97	0.00	0.00	25.62	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	Insig	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082.33	0.13	0.12	Hexane
Other Insignificant Activities	Insig	0.05	0.05	0.05	0.00	0.00	5.50	0.00	0.00	0.11	0.00	0.00
Totals		84.70	85.08	85.08	0.04	6.69	764.81	5.62	8,082.33	85.84	57.90	Triethylene

Limited Potential Emissions (tons/year)												
Plant ID	Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	total HAPs	worst case single HAP	
Resin Silo	EU-01	25.05	25.05	25.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaCO ₃ Silo	EU-02	16.51	16.51	16.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastic Mixing	EU-05	12.38	12.38	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extruder #1	EU-06	7.41	7.41	7.41	0.00	0.00	13.74	0.00	0.00	0.00	0.00	0.00
Extruder #2	EU-07	7.41	7.41	7.41	0.00	0.00	13.74	0.00	0.00	0.00	0.00	0.00
Machine 1 Printer (Tinter/Washcoater)	EU-09	0.00	0.00	0.00	0.00	0.00	23.00	0.00	0.00	24.00	9.00	Triethylene
Machine 2 Printer (Profama)	EU-11	0.00	0.00	0.00	0.00	0.00						
Machine 3 Printer (Magnat)	EU-13	0.00	0.00	0.00	0.00	0.00						
Machine 4 Printer (W & H3)	EU-15	0.00	0.00	0.00	0.00	0.00						
Machine 6 Printer (W & H6)	EU-17	0.00	0.00	0.00	0.00	0.00						
Machine 7 Printer (Nakajima) - New	EU-19	0.00	0.00	0.00	0.00	0.00						
Machine 2 Laminator (Profama)	EU-12	3.00	3.00	3.00	0.00	0.00		39.00	0.00			
Machine 3 Laminator (Magnat)	EU-14				0.00	0.00	0.00		0.00			
Machine 4 Laminator (W & H3)	EU-16				0.00	0.00	0.00		0.00			
Machine 6 Laminator (W & H6)	EU-18				0.00	0.00	0.00		0.00			
Machine 7 Laminator (Nakajima) - New	EU-20				0.00	0.00	0.00		0.00			
Natural Gas Combustion	Insig	0.13	0.51	0.51	0.04	6.69	0.37	5.62	8,082.33	0.13	0.12	Hexane
Other Insignificant Activities	Insig	0.05	0.05	0.05	0.00	0.00	5.50	0.00	0.00	0.11	0.00	0.00
Totals		71.94	72.32	72.32	0.04	6.69	95.34	5.62	8,082.33	24.24	9.00	

**Appendix A: Emission Calculations
Existing Bulk Material Storage & Handling (EU-01 & EU-02)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Raw Material	Unit ID Number	Max Rate (tons/hour)	PM/PM10 Emission Factor (lb PM/ton)	Uncontrolled PTE of PM/PM10 (tons/year)	Pollution Control (% efficiency)	Controlled PTE of PM/PM10 (tons/year)
Resin Silo	EU-01	0.44	13	25.05	99%	0.251
CaCO ₃ Silo	EU-02	0.29	13	16.51	99%	0.165
Totals:				41.6		0.42

Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material * 2000 lb/ton material
 Uncontrolled PTE of PM (tons/year) = Max Rate (tons/year) * Emission factor (lb PM/ton material) * 1 ton/2000 lb * 8760 hour/year
 Controlled PTE of PM (tons/year) = Uncontrolled PTE of PM (tons/year) * (1-Pollution Control (% efficiency))

**Appendix A: Emission Calculations
Existing Plastic Mixing Line (EU-05)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Plastic Film Mixing Process (EU-05)

Raw Material	Unit ID Number	Max Rate (ton/hour)	PM/PM10 Emission Factor (lb PM/ton)	Uncontrolled PTE of PM/PM10 (tons/year)	Pollution Control (% efficiency)	Controlled PTE of PM/PM10 (tons/year)
Dry Scale	EU-05-01	0.739	0.6	1.94	95%	0.097
Scale Transfer	EU-05-02	0.794	0.6	2.09	99%	0.021
Mixer Transfer	EU-05-03	0.794	0.6	2.09	99%	0.021
Cool Blend Transfer	EU-05-04	0.794	0.6	2.09	99%	0.021
Tote Transfer	EU-05-05	0.794	0.6	2.09	99%	0.021
Ribbon Blend Transfer	EU-05-06	0.794	0.6	2.09	99%	0.021
Totals:				12.4		0.201

Note:

Calculations were taken from original FESOP 043-6294-00039

Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material * 2000 lb/ton material

Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23

Uncontrolled PTE of PM (tons/year) = Max Rate (tons/year) * Emission factor (lb PM/ton material) * 1 ton/2000 lb * 8760 hour/year

Controlled PTE of PM (tons/year) = Uncontrolled PTE of PM (tons/year) * (1-Pollution Control (% efficiency))

**Appendix A: Emission Calculations
Existing Extruders (EU-06 and EU-07)**

Company Name: Product Specialties, Inc.

Address: 2073 McDonald Avenue, New Albany, Indiana 47150

Significant Permit Revision: 043-32326-00039

Reviewer: Ryan Graunke

Unlimited Potential to Emit

Plant ID	Unit ID Number	Maximum Usage (lb cmpd/year)	VOC Emission Factor (lb VOC/lb cmpd)	Unlimited PTE of VOC (tons/year)	VCM Emission Factor ¹ (lb VCM/lb cmpd)	Unlimited PTE of VCM (tons/year)	PM/PM10 Emission Factor (lb PM/lb cmpd)	Unlimited PTE of PM/PM10 (tons/year)
Extruder #1	EU-06	8,935,200	0.0043	19.2	0.00001	0.0447	0.00232	10.36
Extruder #2	EU-07	8,935,200	0.0043	19.2	0.00001	0.0447	0.00232	10.36
Totals:		17,870,400		38.42		0.09		20.73

Limited Potential to Emit

Plant ID	Unit ID Number	Limited Usage (lb cmpd/year)	VOC Emission Factor (lb VOC/lb cmpd)	Limited PTE of VOC (tons/year)	VCM Emission Factor ¹ (lb VOC/lb cmpd)	Limited PTE of VCM (tons/year)	PM/PM10 Emission Factor (lb PM/lb cmpd)	Limited PTE of PM/PM10 (tons/year)
Extruder #1	EU-06	6,389,544	0.0043	13.7	0.00001	0.0319	0.00232	7.41
Extruder #2	EU-07	6,389,544	0.0043	13.7	0.00001	0.0319	0.00232	7.41
Totals:		12,779,088		27.48		0.06		14.82

Note:

Emission factors for the extruders were derived from actual stack test data from a similar source and used in FESOP No.: 043-15615-00039, issued January 1) The maximum vinylchloride monomer (VCM) content of the PVC is 10ppm

Methodology:

Maximum Usage (lb cmpd/year) = 1020 lbs cmpd/hr * 8760 hrs/year

Unlimited PTE (tons/year) = Maximum usage (lb cmpd/year) * Emission factor (lb pollutant/lb cmpd) * 1 ton/2000 lbs

Limited PTE (tons/year) = Limited usage (lb cmpd/year) * Emission factor (lb pollutant/lb cmpd) * 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC for Rotogravure Presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19)

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Plant ID	Unit ID Number	Worst Case As-Applied Ink	Max Line Speed (feet/minute)	Max Width (inches)	Max Throughput (MMin ² /year)	Max Coverage per Head (lb/MMin ² /)	Laydown Rate (gal/MMin ² /printing head)	# of Printing Heads	Density (lb/gal)	Max Coverage (lb/MMin ²)	Weight % VOC	PTE of VOC (tons/year)
Machine 1 Printer (Tinter/Washcoater)	EU-09	WF-40-357	36	57	12,942	15.0	1.705	1	8.80	15.0	13.8%	13.43
Machine 2 Printer (Profama)	EU-11	WF-40-357	45	57	16,178	14.4	1.636	4	8.80	57.6	13.8%	64.48
Machine 3 Printer (Magnat)	EU-13	WF-40-357	45	57	16,178	14.4	1.636	4	8.80	57.6	13.8%	64.48
Machine 4 Printer (W & H3)	EU-15	WF-40-357	90	57	32,356	14.4	1.636	6	8.80	86.4	13.8%	193.45
Machine 6 Printer (W & H6)	EU-17	WF-40-357	45	57	16,178	14.47	1.644	4	8.80	57.9	13.8%	64.80
Machine 7 Printer (Nakajima) - New	EU-19	WF-40-357	90	57	32,356	14.27	1.622	6	8.80	85.6	13.8%	191.75
Total:												592.4

Note:

Max coverage per head provided in Section A.2 of FESOP Administrative Amendment # 043-32207-00039 (EU-09,11,13,15, 17)

Laydown rate provided by source for EU-19

Worst Case As-Applied Ink information provided by source on October 24, 2012

Lines speeds corrected by information provided by source on October 24, 2012

Methodology:

MMin² = Million inch square

Max. throughput (MMin²/year) = Max line speed (feet/min) * 12 inches/foot * Max print width (inches) * 60 min/hour * 8760 hours/year * 1 MMin²/1,000,000 in²

Laydown rate (gal/MMin²/printing head) (EU-09,11,13,15, 17) = Maximum coverage per head (lb/MMin²/printing head) / Density (lb/gal)

Maximum coverage per head (lb/MMin²/printing head) (EU-19) = Laydown rate (gal/MMin²/printing head) * Density (lb/gal)

Maximum Coverage (lb./MMin²) = Maximum coverage per print head (lb/MMin²/printing head) * Number of printing heads

PTE of VOC (tons/year) = Max. coverage (lbs/MMin²) * Weight % VOC * Max. throughput (MMin²/year) * 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC for Rotogravure Presses (EU-09, EU-11, EU-13, EU-15, EU-17, and EU-19)

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Administrative Amendment: 043-32326-00039
Reviewer: Ryan Graunke

Plant ID	Unit ID Number	Worst Case As-Applied Ink	Max Throughput (MMin ² /year)	Max Coverage (lb/MMin ²)	Weight % Triethylamine	PTE of Triethylamine (tons/year)	PTE of Total HAPs (tons/year)
Machine 1 Printer (Tinter/Washcoater)	EU-09	WF-40-357	12,942	15	2.00%	1.94	1.94
Machine 2 Printer (Profama)	EU-11	WF-40-357	16,178	57.6	2.00%	9.32	9.32
Machine 3 Printer (Magnat)	EU-13	WF-40-357	16,178	57.6	2.00%	9.32	9.32
Machine 4 Printer (W & H3)	EU-15	WF-40-357	32,356	86.4	2.00%	27.96	27.96
Machine 6 Printer (W & H6)	EU-17	WF-40-357	16,178	57.9	2.00%	9.36	9.36
Machine 7 Printer (Nakajima) - New	EU-19	WF-40-357	32,356	85.6	2.00%	27.71	27.71
Totals:						85.61	85.61

Note:

Worst Case As-Applied Ink information provided by source on October 24, 2012

Methodology:

MMin² = Million inch square

PTE of HAP (tons/year) = Max Throughput (MMin²/yr) * Max Coverage (lb/MMin²) * Weight % HAP * 1 ton/2,000 lbs

**Appendix A: Emission Calculations
Laminators (EU-12, EU-14, EU-16, EU-18, and EU-20)**

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Unlimited PTE of each laminator

Plant ID	Unit ID Number	Maximum Usage (yards/hour)	Maximum Usage (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Unlimited PTE of VOC (tons/year)	PM/PM10 Emission Factor (lb PM/yard)	Unlimited PTE of PM/PM10 (tons/year)
Machine 2 Laminator (Profama)	EU-12	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 3 Laminator (Magnat)	EU-14	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 4 Laminator (W & H3)	EU-16	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 6 Laminator (W & H6)	EU-18	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Machine 7 Laminator (Nakajima) - New	EU-20	900	7,884,000	0.422	0.0065	25.6	0.0005	1.97
Totals:						128		9.9

Limited PTE of each laminator to comply with 326 IAC 8-1-6

Plant ID	Unit ID Number	Limited Usage (yards/hour)	Limited Usage ¹ (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Limited PTE of VOC (tons/year)	326 IAC 8-1-6 Limit (tons/year)	Will Comply?
Machine 2 Laminator (Profama)	EU-12	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 3 Laminator (Magnat)	EU-14	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 4 Laminator (W & H3)	EU-16	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 6 Laminator (W & H6)	EU-18	NA	7,661,538	NA	0.0065	24.9	25	Yes
Machine 7 Laminator (Nakajima) - New	EU-20	NA	7,661,538	NA	0.0065	24.9	25	Yes

Limited PTE of all laminators to avoid 326 IAC 2-7 and 326 IAC2-2

Plant ID	Unit ID Number	Limited Usage (yards/hour)	Limited Usage ² (yards/year)	Process Throughput (ton/hour)	VOC Emission Factor (lb VOC/yard)	Limited PTE of VOC (tons/year)	PM/PM10 Emission Factor (lb PM/yard)	Limited PTE of PM/PM10 (tons/year)
All Laminators	EU-12, 14, 16, 18, 20	NA	12,000,000	NA	0.0065	39.0	0.0005	3.00
Totals:						39.0		3.00

Note:

Maximum Usage corrected according to information provided by source on October 24, 2012

Emission factors for the laminator were derived from actual stack test data from a similar source and used in FESOP No.: 043-15615-00039, issued January 22, 2003.

1) Permitted usage limited to 7,661,538 yards/year for each any individual laminator to avoid 326 IAC 8-1-6 applicability threshold of 25 tons/year PTE of VOC

2) Permitted usage limited to 12,000,000 yards/year for all five units, including new unit, to avoid 326 IAC 2-7 (Part 70 rules) and 326 IAC 2-2 (PSD)

Methodology:

Maximum usage (yards/year) = 900 (yards/hour) * 8760 hours/year

Process throughput (tons/hour) = Maximum usage (yards/hour) * 15 oz/yard * 1 lb/16 oz * 1 ton/2000 lb

Unlimited PTE of VOC/PM/PM10 (tons/year) = Unlimited Usage (yards/year) * Emission Factor (lb/yard) * 1 ton/2000 lbs

Limited PTE of VOC/PM/PM10 (tons/year) = Limited Usage (yards/year) * Emission Factor (lb/yard) * 1 ton/2000 lbs

Appendix A: Emission Calculations
Ink Compliance to 326 IAC 8-2-11 and NSPS Subpart FFF

Company Name: Product Specialties, Inc.
Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Significant Permit Revision: 043-32326-00039
Reviewer: Ryan Graunke

Machine 7 Printer Compliance with 326 IAC 8-2-11 (Surface Coating VOC Emission Limitations for Fabric and Vinyl Coating)

Worst Case As-Applied Ink	Density (lb/Gal)	Weight % Volatile (H2O & VOC)	Weight % Solids (non-volatile)	Weight % Water	Weight % VOC	Volume % Water	lbs VOC/gal. of ink less water	326 IAC 8-2-11 Limit (lbs VOC/gal. of ink less water)	Will Comply?
WF-40-357	8.8	69.0%	31.0%	55.2%	13.8%	58.2%	2.91	4.8	Yes

Machine 7 Printer Compliance with NSPS Subpart FFF

Worst Case As-Applied Ink	Density (lb/Gal)	Weight % Volatile (H2O & VOC)	Weight % Solids (non-volatile)	Weight % Water	Weight % VOC	Volume % Water	lbs VOC/lb ink solids	NSPS Subpart FFF Limit (lbs VOC/lb of ink solids)	Will Comply?
WF-40-357	8.8	69.0%	31.0%	55.2%	13.8%	58.2%	0.45	1.0	Yes

Note:

Worst Case As-Applied Ink information provided by source on October 24, 2012

Methodology:

Volume % Water = Weight % Water * Density (lb/gal) / Density of water (8.345 lbs/gal)

Lbs. VOC/gal. of ink less water = Density (lb/gal) * Weight % VOC / (1-Volume % Water)

Lbs. VOC/lb of ink solids = Weight % VOC / Weight % Solids

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

Company Name: Product Specialties, Inc.
Address City IN Zip: 2073 McDonald Avenue, New Albany, Indiana 47150
Permit Number: 043-32326-00039
Reviewer: Ryan Graunke

Emission units	Number of Unit	Heat Input Capacity Each (MMBTU/hr/unit)	Total Potential Throughput (MMSCF/yr)
Natural Gas Boiler	1	2.70	23.2
Space Heater	1	0.58	5.0
Space Heater	8	0.09	6.2
Space Heater	6	0.10	5.2
Space Heater	2	0.12	2.1
Space Heater	1	0.83	7.1
Space Heater	1	0.12	1.0
Machine 1 Oven	2	0.40	6.9
Machine 2 Oven	4	0.75	25.8
Machine 4 Oven	1	3.00	25.8
Machine 6 Oven	4	0.75	25.8
Total		15.59	133.9

Note:

Units were corrected according to information provided by source on October 24, 2012

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.13	0.51	0.51	0.04	6.69	0.37	5.62

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 emission factor is filterable and condensable PM2.5 combined

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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.406E-04	8.033E-05	5.021E-03	1.205E-01	2.276E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.347E-05	7.364E-05	9.372E-05	2.544E-05	1.406E-04
	Combined HAPs				0.13

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120.000	2.3	2.2
Potential Emission in tons/yr	8,033	0.2	0.1
Summed Potential Emissions in tons/yr	8,034		
CO2e Total in tons/yr	8,082		

Methodology:

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Total Heat Input Capacity = \sum (Heat Input Capacity Each (MMBtu/hr) * Number of Units)

Potential Throughput (MMCF) = Heat Input Capacity Each (MMBtu/hr) * Number of Units * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Sandra Vargas
Product Specialties Inc.
2073 McDonald Ave
New Albany, IN 47150

DATE: December 11, 2012

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

SUBJECT: Final Decision
FESOP - Significant Permit Revision
043 - 32326 - 00039

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:
Kenny Smith, Plant Mgr
Holly Padovani EHS Technology Group
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 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

December 11, 2012

TO: New Albany Floyd Co Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Product Specialties Inc.
Permit Number: 043 - 32326 - 00039

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 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 12/11/2012 Product Specialties, Inc 043 - 32326 - 00039 final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

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		Sandra Vargas Product Specialties, Inc 2073 McDonald Ave New Albany IN 47150 (Source CAATS) Via confirmed delivery										
2		Kenny Smith Plant Mgr Product Specialties, Inc 2073 McDonald Ave New Albany IN 47150 (RO CAATS)										
3		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)										
4		Floyd County Commissioners 311-319 West 1st St, Rm 214 New Albany IN 47150 (Local Official)										
5		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 (Local Official)										
6		New Albany Floyd Co Public Library 180 W Spring St New Albany IN 47150-3692 (Library)										
7		Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 (Health Department)										
8		Maurice L. King 2035 McDonald Avenue New Albany IN 47150 (Affected Party)										
9		Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 (Affected Party)										
10		Ms. Holly Padovani EHS Technology Group, LLC 965 Capstone Dr. Suite 420 Miamisburg OH 45342 (Consultant)										
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.
---	--	--	--