

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR MANAGEMENT

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 1-800-451-6027

**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 facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F043-6294-00039	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: August 12, 1997
First Significant FESOP Modification: SMF/ENSR 043-10076-00039	
Pages Affected: 3, 4, 5, 15, 19, 20, 21, 22, 23, 24, 26,	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a plastic film manufacturing plant.

Responsible Official: Edward M. Ernst
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150
SIC Code: 3081
County Location: Floyd County
County Status: Nonattainment for VOCs and NO_x
Source Status: Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

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

- (a) One (1) PVC resin powder storage silo, EU-01, with a maximum storage capacity of 78.8 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V1. The material is conveyed via one (1) PVC resin powder transfer system, EU-03, at a maximum throughput capacity of 3,883 tons per year. This system exhausts to stack vent V3;
- (b) One (1) calcium carbonate (CaCO₃) storage silo, EU-02, with a maximum storage capacity of 61 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V2. The material is conveyed via one (1) CaCO₃ transfer system, EU-04, with a maximum throughput capacity of 2,590 tons per year. This system exhausts to stack vent V4;
- (c) Two (2) plastic film mixing lines, identified as EU-05, and EU-10. Each line consists of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scales, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. These lines also consist of a liquid scale with a maximum throughput of 4,800 pounds per hour and a liquid mixer with a maximum throughput of 720 pounds per hour and exhausts to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, located in two separate buildings that exhaust to stacks S4 and S5, respectively. Each extrusion unit is limited to 521 pounds of compound per hour;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/MM in²) of PVC sheet;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 lb/MM in² of PVC sheet;
- (g) One (1) Wash Coater #2, with a line speed of 150 feet per minute (ft/min), and a coating width of 57 inches; and
- (h) Two (2) laminators, identified as EU-08, and EU-12. Each laminator has a limited production

rate of 7,384,680 yds laminated film/year.

A.3 Insignificant Activities [326 IAC 2-7-1(20)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) natural gas-fired boiler rated at 2.7 mmBtu per hour;
- (b) one (1) natural gas-fired boiler rated at 2.0 mmBtu/hr,
- (c) two (2) natural gas-fired indirect heaters rated at 0.75 mmBtu/hr each,
- (d) one (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (e) three (3) granulators that chop waste film and recirculate to the mixing line;
- (f) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (g) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (h) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (i) closed loop heating and cooling systems;
- (j) natural draft cooling towers not regulated under a NESHAP;
- (k) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (l) paved and unpaved roads and parking lots with public access; and
- (m) blowdown for sight glass, boiler, compressors, pumps, and cooling towers.

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

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

SECTION B GENERAL CONDITIONS

B.1 General Requirements [IC 13-15] [IC 13-17] (Prior to July 1, 1996: IC 13-7 and IC 13-1-1)

The permittee shall comply with the provisions of IC 13-15 (Permits Generally), IC 13-17 (Air Pollution Control) and the rules promulgated thereunder.

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

Terms in this permit shall have the meaning assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11 (prior to July 1, 1996, IC 13-7-2, IC 13-1-1-2), 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-5-5-3 (prior to July 1, 1996, IC 13-7-10-2.5), of the permit.

B.4 Enforceability [326 IAC 2-8-6]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9]

The expiration of this permit terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-7.

B.6 Severability [326 IAC 2-8-4(4)]

- (a) The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- (b) Indiana 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.

B.7 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.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015,

- (b) The Permittee shall also provide additional information as requested by IDEM, OAM, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).
- (c) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that the IDEM, OAM 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.
- (d) Upon written request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAM, along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAM).

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM 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.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
- (1) enforcement action;
 - (2) permit termination, revocation and reissuance or modification; and
 - (3) denial of a permit renewal application.
- (b) 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.
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]
- Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- A responsible official is defined at 326 IAC 2-7-1(33).
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- (a) The Permittee shall annually certify that the source has complied with the terms and conditions contained in this permit, including emission limitations, standards, and work practices. The certification shall be submitted July 1 to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015.
- (b) This annual compliance certification report required by this permit shall be timely if:
- (1) Delivered by U.S. mail and postmarked on or before the date it is due; or
 - (2) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The identification of each term and 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; and
 - (5) Such other facts as IDEM, OAM, may require to determine the compliance status of the source.

B.13 Preventive Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]

- (a) The Permittee shall prepare, maintain and implement operation and Preventive Maintenance Plans as necessary including the following information on each:
- (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;
 - (3) Corrective actions that will be implemented in the event an inspection indicates an out of specification situation;
 - (4) A time schedule for taking such corrective actions including a schedule for devising additional corrective actions for situations that may not have been predicted; and
 - (5) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.
- (b) Preventive Maintenance Plans shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.14 Emergency Provision [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 as follows:
- (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 describes 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 of this permit;
 - (4) The Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency occurrence by telephone or facsimile;

Telephone No.: 1-800-451-6027 (ask for Office of Air Management) or,
Telephone No.: 317-233-5674
Facsimile No.: 317-233-5967
 - (5) The Permittee submitted written notice or by facsimile of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015,

within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall fulfill 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(C)(33).

- (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 any emergency or upset provision contained in 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plan required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency 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 clause (B) above.

- B.15 Deviations from Permit Requirements and/or Conditions [326 IAC 2-8-4(3)(C)(ii)]
Deviations from requirements, (for emergencies see Condition B.14 - Emergency Provision) the probable cause of such deviations, and any corrective actions or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

Written notification shall be submitted on the attached Deviation Occurrence Reporting Form.

- B.16 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)]
[326 IAC 2-8-8(b)] [326 IAC 2-8-8(c)]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a 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)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 (prior to July 1, 1996, in IC 13-7-10-5) or if the commissioner determines any of the following:
- (1) That it 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, OAM, 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 practical. [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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

- B.17 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, OAM, and shall include, at minimum, 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(20).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015.

- (b) Timely Submittal of Permit Renewal [326 IAC 2-5-3]
- (1) The Permittee has a duty to submit a timely and complete permit renewal application. A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) Delivered by U. S. mail and postmarked on or before the date it is due; or
 - (C) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.
- (2) If IDEM, OAM 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.
- (c) Right to Operate After Application of Renewal [326 IAC 2-8-9]
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, OAM 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 in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.18 Administrative Permit Amendment [326 IAC 2-8-10]

- (a) An administrative permit amendment is a FESOP revision that makes changes of the type specified under 326 IAC 2-8-10(a).
- (b) An administrative permit amendment may be made by IDEM, OAM, consistent with the procedures specified under 326 IAC 2-8-10(b).
- (c) The Permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Minor Permit Modification [326 IAC 2-8-11(a)] [326 IAC 2-8-11(b)(1) and (2)]

- (a) A permit modification is any revision to this permit that cannot be accomplished as an administrative permit amendment under 326 IAC 2-8-10.
- (b) Minor permit modification procedures shall follow the procedures specified under 326 IAC 2-8-11(b)(1)(A) through (F).
- (c) An application requesting the use of minor modification procedures shall meet the requirements of 326 IAC 2-8-3(c) and shall include the information required in 326 IAC 2-8-11(b)(3)(A) through (D).

- (d) The Permittee may make the change proposed in its minor permit modification application immediately after it files such application unless the change is subject to the construction permit requirements of 326 IAC 2-1, 326 IAC 2-2, or 326 IAC 2-3. After the Permittee makes the change allowed under minor permit modification procedures, and until IDEM, OAM takes any of the actions specified in 326 IAC 2-8-11(b)(5), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. [326 IAC 2-8-11(b)(6)]

B.20 Significant Permit Modification [326 IAC 2-8-11(d)]

- (a) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments.
- (b) Any significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions of this permit shall be considered significant.
- (c) Nothing in 326 IAC 2-8-11(d) shall be construed to preclude the Permittee from making changes consistent with 326 IAC 2-8 that would render existing permit compliance terms and conditions irrelevant.
- (d) Significant modifications of this permit shall meet all requirements of 326 IAC 2-8, including those for application, public participation, and review by the U.S. EPA, as they apply to permit issuance and renewal.

B.21 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable FESOP's, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable implementation plan (SIP) or in applicable state requirements promulgated by the U.S. EPA.

B.22 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d), without 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) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - (3) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015,

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. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(C)(33); and

- (4) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review. Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-8-15(b)(1), (c)(1), and (d).
- (b) For each such change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7) and subject to the constraints in section (a) of this condition and those in 326 IAC 2-8-15(d).

B.23 Construction Permit Requirement [326 IAC 2-1]

Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).

B.24 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of IDEM identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, 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 are kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of demonstrating compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of demonstrating compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

B.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, consistent with the fee schedule established in 326 IAC 2-8-16.
- (b) Failure to pay may result in administrative enforcement action, revocation of this permit, referral to the Office of Attorney General for collection, or other appropriate measures.
- (c) The Permittee shall pay the annual fee within thirty (30) calendar days of receipt of a billing by IDEM, OAM or in a time period that is consistent with the payment schedule issued by IDEM, OAM.
- (d) If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before due date, the Permittee shall call the following telephone numbers: 1-800-451-6027 or 317-233-0179 (ask for OAM, Data Support Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations [326 IAC 2-8-4(1)]

C.1 Overall Source Limit (326 IAC 2-8)

Pursuant to 326 IAC 2-8, emissions of any regulated pollutant from the entire source shall not exceed 99 tons per 12-month period. Emissions of hazardous air pollutants (HAPs) from the entire source shall not exceed 9 tons of any individual HAP per 12-month period or 24 tons of any combination of HAPs per 12-month period. Emissions shall include those from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7-1(20). The source shall be allowed to add insignificant activities not already listed in this permit, as long as the total emissions from the source do not exceed the above specified limits. In the event that any condition or combination of conditions in Section D of this permit differs from the above, the most restrictive limit will prevail.

C.2 Opacity

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following:

- (a) Visible emissions shall not exceed an average of 40 percent opacity in 24 consecutive readings,
- (b) Visible emissions shall not exceed 60 percent opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

- C.3 Open Burning
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.
- C.4 Fugitive Dust Emissions
The Permittee shall be in violation of 326 IAC 6-4 if any of the criteria specified in 326 IAC 6-4-2 (1) through (4) are violated.
- C.5 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- (a) All equipment that potentially might emit pollutants into the ambient air shall be properly operated and maintained.
 - (b) Unless otherwise stated in this permit, all air pollution control equipment listed in this permit shall be operated at all times that the emission unit(s) vented to the control equipment is in operation.
 - (c) The permittee shall perform all necessary maintenance and make all necessary attempts to keep all air pollution control equipment in proper operating condition at all times.

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

- C.6 Compliance Monitoring [326 IAC 2-8-4(3)]
Compliance with applicable requirements shall be documented in accordance with the provisions of 326 IAC 2-8-4(3). The Permittee shall be responsible for installing any necessary equipment and initiating any additional monitoring no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015,

in writing, with full justification of the reasons for inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(C)(33).

- C.7 Maintenance of Monitoring Equipment [326 IAC 1-6]
The Permittee shall perform all necessary maintenance and make all necessary attempts to keep all required monitoring equipment in proper operating condition at all times. In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. Preventive Maintenance Plans of the monitors shall be implemented. In addition prompt correction, as indicated, shall be initiated within the time frames specified, whenever the parameters monitored fall outside of the indicated values.
- C.8 Pressure Gauge Specifications
Whenever a condition in this permit requires the taking of pressure drop across any part of the unit or its control device the gauge employed shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within $\pm 2\%$ of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

Corrective Actions [326 IAC 2-8-4(1)] [326 IAC 2-8-5(1)]

C.9 Failure to Take Corrective Action

For each unit for which parametric monitoring is required, appropriate corrective actions as described in the Preventative Maintenance Plan shall be taken when indicated by monitoring information. Failure to take corrective action following an excursion of a surrogate monitoring parameter within the prescribed time will constitute a violation of the permit unless taking the corrective action set forth in the Plan would be unreasonable.

After investigating the reason for the excursion, the Permittee may be excused from taking further corrective action for any of the following reasons:

- (a) Providing that prompt action was taken to correct the monitoring equipment, that the monitoring equipment malfunctioned, giving a false reading; or
- (b) The Permittee has determined that the parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
- (c) An automatic measurement was taken when the process was not operating; or
- (d) The Permittee determines that the process has already returned to operating within "normal" parameters and no corrective action is required.

Records shall be kept of all instances in which the action values were not met and of all corrective actions taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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

C.10 Monitoring Data Availability

All observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions. Records shall be kept of the times that the equipment is not operating. If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality. If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded. At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed 5% of the operating time in any quarter. Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason.

C.11 General Record Keeping Requirements

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one hour upon verbal request of an IDEM, OAM representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two years providing they are made available within thirty (30) days after written request.
- (b) Records of required monitoring information shall include:
 - (1) The date, place, and time of sampling or measurements;

- (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) All preventive maintenance and corrective actions that were implemented. Such records shall briefly describe what was done and indicate who did it;
 - (5) Relevant work purchases orders;
 - (6) Quality assurance and quality control procedures;
 - (7) Operator's standard operating procedures;
 - (8) Manufacturer's specifications or their equivalent; and
 - (9) Equipment "troubleshooting" guidance.
- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

C.12 General Reporting Requirements

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (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, OAM, on or before the date it is due.

- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Emission Reporting [326 IAC 2-6]

- (a) The Permittee shall submit a certified, annual emission statement that meets the requirements of 326 IAC 2-6 (Emission Reporting). This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management
Data Support Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015.

- (b) This annual emission statement required by this permit shall be timely if:
 - (1) Delivered by U.S. mail and postmarked on or before the date it is due; or
 - (2) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.

C.14 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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

A plastic film manufacturing line consisting of:

- (a) One (1) PVC resin powder storage silo, EU-01, with a maximum storage capacity of 78.8 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V1. The material is conveyed via one (1) PVC resin powder transfer system, EU-03, at a maximum throughput capacity of 3,883 tons per year. This system exhausts to stack vent V3;
- (b) One (1) calcium carbonate (CaCO₃) storage silo, EU-02, with a maximum storage capacity of 61 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V2. The material is conveyed via one (1) CaCO₃ transfer system, EU-04, with a maximum throughput capacity of 2,590 tons per year. This system exhausts to stack vent V4;
- (c) Two (2) plastic film mixing lines, identified as EU-05, and EU-10. Each line consists of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scales, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. These lines also consist of a liquid scale with a maximum throughput of 4,800 pounds per hour and a liquid mixer with a maximum throughput of 720 pounds per hour and exhausts to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, located in two separate buildings that exhaust to stacks S4 and S5, respectively. Each extrusion unit is limited to 521 pounds of compound per hour;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/MM in²) of PVC sheet;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 lb/MM in² of PVC sheet;
- (g) One (1) Wash Coater #2, with a line speed of 150 feet per minute (ft/min), and a coating width of 57 inches; and
- (h) Two (2) laminators, identified as EU-08, and EU-12. Each laminator has a limited production rate of 7,384,680 yds laminated film/year.

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

D.1.1 Particulate Matter

Pursuant to 326 IAC 6-3 (Process Operations), the following facilities of the plastic film manufacturing plant shall not exceed the following associated particulate matter emissions:

Process Facility	Stack ID	Allowable PM Emission (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	2.37
CaCO ₃ Storage Silo/Transfer System	V2	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	3.52
Extrusion Unit, EU-06	S4	1.66
Extrusion Unit, EU-07	S5	1.66
Laminator, EU-08	S6	0.90

Plastic Film Mixing Line, EU-10	V3	3.52
Laminator, EU-12	S8	0.90
TOTAL		16.36

D.1.2 Particulate Matter < 10 microns (PM-10)

Pursuant to 326 IAC 2-8 (FESOP Program), the following facilities of the plastic film manufacturing plant shall not exceed the following associated material throughput rates and PM-10 emissions:

Process Facility	Stack ID	Throughput Limits (tons/hr)	Emission Factors	PM-10 Emission Limits (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	0.44	13 lb/ton	2.37
CaCO3 Storage Silo/Transfer System	V2	0.29	13 lb/ton	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	0.794	0.6 lb/ton	3.52
Extrusion Unit, EU-06	S4	0.51	0.00232 lb/lb	1.66
Extrusion Unit, EU-07	S5	0.51	0.00232 lb/lb	1.66
Laminator, EU-08	S6	1800*	0.0005 lb/yd	0.90
Plastic Film Mixing Line, EU-10	V3	0.794	0.6 lb/ton	3.52
Laminator, EU-12	S8	1800*	0.0005 lb/yd	0.90

* this throughput limit is measured as yards of PVC sheet/hr
 1 yard of PVC sheet = 15 ounces
 1 ounce = 16 lb

The above PM emission limits shall be demonstrated using each corresponding Emission Factor to calculate the emissions. Therefore, the requirements of 326 IAC 2-7 do not apply.

D.1.3 Visible Emissions

Pursuant to 326 IAC 5-1 (Visible Emissions Limitations), the visible emissions from the plastic film manufacturing plant shall not exceed an average of 40 percent opacity in 24 consecutive readings or 60 percent opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

D.1.4 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 from the rotogravure presses EU-09, EU-11 and the wash coater #2 shall be limited to 4.8 pounds of VOC per gallon of coating less water delivered to the applicator.

D.1.5 Hazardous Air Pollutants

The hazardous air pollutant emissions shall be limited as follows:

- (a) A single hazardous air pollutant (HAP) emissions shall not exceed 9 tons/12-month period rolled on a monthly basis.
- (b) Any combination of HAPs emissions shall not exceed 24 tons/12-month period rolled on a monthly basis.

Therefore, the requirements of 326 IAC 2-7 do not apply.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the two (2) Laminators shall be limited as follows:

- (a) Laminator EU-08 shall be limited to a production rate of 7,358,400 yards of film per 12-month period rolled on a monthly basis. The limit on this laminator will restrict the VOC emissions to 24 tons per 12-month period rolled on a monthly basis. Compliance with this limit will make 326 IAC 8-1-6 (General Reduction) requirements not applicable in this case.
- (b) The new Laminator, EU-12 shall be limited to a production rate of 7,358,400 yards of film per 12-month period rolled on a monthly basis. The limit on this laminator will restrict the VOC emissions to 24 tons per 12-month period rolled on a monthly basis. During its first twelve (12) months of operation, its production rate shall be limited such that the total production rate divided by the accumulated months of operation shall not exceed 613,200 yards per month.

Compliance with this limit will make 326 IAC 8-1-6 (General Reduction) requirements not applicable in this case.

D.1.7 Volatile Organic Compounds [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the following facilities shall be limited as follows:

- (a) The materials compounded from Extruder Line 1, EU-06 shall be limited to 4,563,960 pounds per 12-month period, rolled on a monthly basis.
- (b) The materials compounded from Extruder Line 2, EU-07 shall be limited to 4,563,960 pounds per 12-month period, rolled on a monthly basis.
- (c) The VOC input usage from the new Rotogravure Press, shall be limited to 14.8 tons per 12-month period rolled on a monthly basis. During the first twelve (12) months of operation of this press, its input VOC usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 1.9 tons per month.
- (d) The VOC input usage from the new Wash Coater #2, shall be limited to 8.1 tons per 12-month period rolled on a monthly basis. During the first twelve (12) months of operation of this coater, its input VOC usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 0.675 tons per month.
- (e) The VOC input usage from the existing Rotogravure Press, EU-09 shall be limited to 5.6 tons per 12-month period rolled on a monthly basis.

Compliance with conditions D1.7(a) through (e) and D1.6 (a) and (b) shall make 326 IAC 2-7, Part 70 Permit Requirements not applicable.

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

D.1.8 Visible Emissions Notations

- (a) Visible emission notations of the plastic film mixing line stack exhaust shall be performed once per working shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations from each storage silo baghouse stack exhaust shall be performed during loading operations. 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) The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.9 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with condition B.13 of this permit is required for this facility.

D.1.10 Preventive Inspections

The following inspections shall be performed when the plastic film manufacturing line baghouse is operating in accordance with the Preventive Maintenance Plan prepared pursuant to condition B.13:

- Weekly:
- (a) Bag cleaning mechanisms;
 - (b) Condition of the ductwork; and
 - (c) Bag tension (shake or reverse-air units only).
- Monthly:
- (a) Internal inspection for air leaks;
 - (b) Bag condition; and
 - (c) Fan condition and operation.

Appropriate corrective actions shall be taken in accordance with condition C.9.

D.1.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse associated with the plastic film mixing line, at least once per working shift when its associated facility is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

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

D.1.12 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

D.1.13 Particulate Matter

The particulate matter (PM) emissions shall be considered in compliance with 326 IAC 6-3 provided that:

- (a) good housekeeping and equipment maintenance procedures are implemented;

- (b) emissions are minimized in receiving, handling, and shipping operations by appropriate methods. These may include but need not be limited to, dust collection systems, windscreens, baffles, restricted hopper openings, enclosed transfer points, flexible drop spouts and/or sleeves;
- (c) no visible accumulation of particulate matter beyond the plant property line;
- (d) emissions do not violate 326 IAC 6-4 (Fugitive Dust Emissions); and
- (e) visible emissions from the processes are operated under "normal" conditions in accordance with operation condition D.1.8.

D.1.14 Volatile Organic Compounds

The raw material limit in Condition D.1.6 and D.1.7 will result in an equivalent VOC emissions of 99 tons per 12 month. The emissions shall be calculated using the emission factor of 0.0043 lb of VOC/ lb compounded from the two extruders, EU-06 and EU-07, and emission factor 0.0065 lb VOC/yard of film from the two lamination lines, EU-8 and EU-12.

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

D.1.15 Record Keeping Requirements

- (a) To document compliance with Condition D.1.8, the Permittee shall maintain records of daily visible emission notations of each stack exhaust.
- (b) To document compliance with Condition D.1.11, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all corrective actions implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
- (c) To document compliance with Condition D.1.6, and D.1.7 the Permittee shall maintain the daily film usages from Laminators EU-08 and Laminator EU-12; ink and solvent usages from Rotogravure Presses EU-09 and EU-11; material compounded from Extruders EU-06 and EU-07; solvent usages from Degreasing operations and other volatile organic material usages from the insignificant activities.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.6, and D.1.7 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Insignificant Activities:

- (a) one (1) natural gas-fired boiler rated at 2.7 mmBtu per hour;
- (b) one (1) natural gas-fired boiler rated at 2.0 mmBtu/hr,
- (c) two (2) natural gas-fired indirect heaters rated at 0.75 mmBtu/hr each,
- (d) one (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (e) three (3) granulators that chop waste film and recirculate to the mixing line;
- (f) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (g) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (h) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (i) closed loop heating and cooling systems;
- (j) natural draft cooling towers not regulated under a NESHAP;
- (k) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (l) paved and unpaved roads and parking lots with public access; and
- (m) blowdown for sight glass, boiler, compressors, pumps, and cooling towers.

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

D.2.1 Particulate Matter

That pursuant to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), particulate matter (PM) emissions from the 2.7 million BTU/hour boiler, the new 2.0 mmBtu/hr boiler, and the new two (2) indirect-fired heaters shall be limited to 0.6 pound per million BTU heat input.

D.2.2 Volatile Organic Compounds

That pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) and 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control), the degreasing operation shall comply with the requirements of this rule.

- (a) According 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) According 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°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) provide a permanent, conspicuous label which lists the operating requirements outlined in 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°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
- A) a freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - B) a water cover when solvent is used is insoluble in, and heavier than, water.
 - C) other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) That 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.

State Form 47738 (5-96)

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP No.: F043-6294-00039

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:

- 9 Deviation Occurrence Reporting Form (For Control Equipment Monitoring)
- 9 Deviation Occurrence Reporting Form (For Material Usage, Quality, Etc.)
- 9 Relocation Notification
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

State Form 47741 (5-96)

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

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

Source Name: Product Specialties, Inc.
Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
FESOP No.: F043-6294-00039

If a deviation has occurred, a separate copy of this report must be submitted for **each** monitoring device on all control equipment listed in this permit. Attach a signed certification to complete this report.

Stack/Vent ID:
Equipment/Operation:
Parameter Subject to Material Type, Quantity Usage or Operation Limitations Specified in the Permit: (ex: 2500 lb/day, 300 hours/yr, 5000 gallons/month)
Determination Period for this Parameter: (ex: 365-day rolling sum, fixed monthly rate)
9 Permit Has No Rate Limitations for this Parameter.
Content Restriction for this Parameter: (ex: maximum of 40% VOC in inks, 0.5% sulfur content)
Demonstration Method for this Parameter: (ex: MSDS, Supplier, material sampling & analysis)
9 Permit Has No Content Limitations for this Parameter.
Comments:

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

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
 Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150
 FESOP No.: F043-6294-00039 Issued: August 12, 1997
 Amendment: SMF/ENSR-043-10076-00039
 Facility: Laminators EU-08 and Laminator EU-12
 Pollutant: VOC
 Production Limit: Laminator EU-08 - 7,384,680 yards per 12-month period, rolled on a monthly basis.
 Laminator EU-12 - 7,384,680 yards per 12-month period, rolled on a monthly basis.

YEAR:

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

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

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

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

FESOP Quarterly Report

Source Name: Product Specialties, Inc.
 Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150
 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150
 FESOP No.: F043-6294-00039 Issued: August 12, 1997
 Amendment: SMF/ENSR-043-10076-00039
 Facility: Sourcewide Facilities (Laminators EU-08 & EU-12; Rotogravure Presses EU-09 & EU-11; Wash Coater #2; Extruders EU-06 & EU-07; & insignificant activities
 Limit: Rotogravure Press EU-09 - 5.6 tons of VOC input usage per 12-month period
 Rotogravure Press EU-11 - 14.8 tons of VOC input usage per 12-month period
 Wash Coater #2 - 8.1 tons of VOC input usage per 12-month period
 Extruder EU-06 - 4,563,960 lb of mat'l cmpd. per 12-month period
 Extruder EU-07 - 4,563,960 lb of mat'l cmpd. per 12-month period
 These limits together with the laminators and insignificant activities will result to a VOC emissions of 99 ton/12 month period

YEAR: _____

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

Note: This Form shall be filled out for each VOC emitting facility

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

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

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

**Technical Support Document (TSD) for First Significant Modification to the
Federally Enforceable State Operating Permit (FESOP) and Enhanced
New Source Review (ENSR)**

Source Background and Description

Source Name:	Production Specialties, Inc.		
Source Location:	2073 McDonald Avenue, New Albany, Indiana 47150		
County:	Floyd		
FESOP No.:	F-043-6294-00039	Issued Date:	August 12, 1997
Amendment No.:	SMF/ENSR 043-10076-00039		
SIC Code:	3081		
Permit Reviewer:	Aida P. De Guzman		

The Office of Air Management (OAM) has reviewed an application for a significant modification to the issued FESOP from Production Specialties, Inc. for the construction and operation of the following new equipment used in the manufacture of polyvinyl chloride (PVC) film and fabric backed PVC wall covering:

- (a) One (1) Plastic Film Mixing Operation Line, identified as EU-10, consisting of a dry scale, with a capacity of 5700 pounds per hour (lb/hr), high intensity mixer, with a capacity of 1700 lbs/hr, and a cooling blender with a capacity of 2,540 lbs/hr;
- (b) One (1) Rotogravure Printer, which consists of four (4) color printing heads, with a line speed of 150 feet per minute (ft/min), and a printing width of 57 inches;
- (c) One (1) Lamination Line, with a production rate limited to 14 yards per minute (yd/min);
- (d) One (1) Wash Coater, with a line speed of 150 feet per minute (ft/min), and a coating width of 57 inches;
- (e) One (1) natural gas-fired boiler, with a heat input rate of 2.0 mmBtu/hr; and
- (f) Two (2) natural gas-fired indirect heater, each with a heat input of 0.75 mmBtu/hr.

The construction of the above equipment in items (a) through (f) will not increase the amount of raw material being handled, processed, and permitted, but rather will enable the source to maximize its capacity, when some equipment are on a downtime.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

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

A complete application for the purposes of this review was received on August 21, 1998

Emissions Calculations:

- (a) Printing Operation Emissions: See Page 1 of 2 TSD Appendix A for detailed calculations.
- (b) Natural Gas Combustion Emissions: See Page 2 of 2 TSD Appendix A for detailed calculations.
- (c) Mixing Operation:

The dry scale has a maximum capacity of 5700 pounds per hour (lb/hr), the high intensity mixer, has a maximum capacity of 1700 lbs/hr, and the cooling blender has a maximum capacity of 2,540 lbs/hr. The source can only process a maximum of 6,959 tons of resins and CaCO₃ per year. Therefore, the maximum throughput of 6,959 tons/yr will be utilized to determine the potential emissions from the proposed dry scale, high intensity mixer, and cooling blender.

Process ID	Max. Rate (tons/yr)	PM/PM10 Emission Factor (lb/ton)	Pot'l. PM/PM10 Emissions (ton/yr)	Pollution Control % Efficiency	Pot'l Controlled PM/PM10 Emissions (ton/yr)	Allowable PM Emissions (ton/yr)
Dry Scale	6,473	0.6	1.94	95%	0.1	15.4
Scale Transfer	6,959	0.6	2.09	99%	0.021	
Mixer Transfer	6,959	0.6	2.09	99%	0.021	
Cool Blend Transfer	6,959	0.6	2.09	99%	2.09	
Tote Transfer	6,959	0.6	2.09	99%	2.09	
Ribbon Blend Transfer	6,959	0.6	2.09	99%	2.09	
		Totals	12.39		6.4	15.4

Methodology:

Emission factors for the mixing line were derived from AP-42, Chapter 11.13, Tables 11.13-2, SCC # 3-05-012-23.

Emissions = Max. Rate, ton/yr * Ef, lb/ton * ton/2000 lb

Allowable PM Emissions = 4.10 P^{0.67}

(d) New Lamination Line Emissions:

The emission factors of 0.0005 lb PM/yd processed and 0.0065 lb VOC/yd processed are based from a stack test conducted at a similar plant, GenCorp-PA.

$$\begin{aligned}
 \text{PM/PM10 Uncontrolled Emissions} &= 30 \text{ yd/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} \\
 &= 15,768,000 \text{ yd/yr} * 0.0005 \text{ lb PM/yd} * \\
 &\quad \text{ton/2000 lb} \\
 &= 3.9 \text{ tons/yr} \\
 \\
 \text{VOC Emissions} &= 30 \text{ yd/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} \\
 &= 15,768,000 \text{ yd/yr} * 0.0065 \text{ lb PM/yd} * \\
 &\quad \text{ton/2000 lb} \\
 &= 51.2 \text{ ton/yr}
 \end{aligned}$$

(e) *The original throughput of 352 yd/hr for the **existing Laminator EU-08** is incorrect. The correct throughput is 1,440 yd/hr. A re-calculation is made as follows:*

$$\begin{aligned}
 1,440 \text{ yd/hr} * 8760 \text{ hr/yr} &= 12,614,400 \text{ yd/yr} * 0.0065 \text{ lb VOC/yd} * \text{ton/2000 lb} \\
 &= 40.99 \text{ tons}^{\text{VOC}}/\text{yr}
 \end{aligned}$$

$$\begin{aligned}
 24 \text{ yd/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ lb/yd} * \text{ton/2000 lb} &= 3.15 \text{ ton of} \\
 \text{PM/PM10/yr}
 \end{aligned}$$

This laminator is limited to 24 ton/yr to avoid the applicability of 326 IAC 8-1-6. The limit is calculated as follows:

$$\begin{aligned}
 24 \text{ tons/yr limit} * 2000 \text{ lb/ton} * \text{yd}/0.0065 \text{ lb} * \text{yr}/8760 \text{ hr} &= 843 \text{ yard/hour} \\
 843 \text{ yd/hr} * 8760 \text{ hr/yr} &= 7,384,680 \text{ yds/yr}
 \end{aligned}$$

New Equipment Summary of Pot'l. Uncontrolled Emissions (ton/year)						
Pollutant	Printing	Combustion	Mixing Operations	New Lamination Line	Existing Lamination	TOTAL Pot'l. Emissions
VOC	44.1	0.0	0.0	51.2	40.99	136.3
PM =PM10	0.0	0.2	6.4	3.9	3.15	13.65
SO2	0.0	0.0	0.0	0.0	0.0	0.0
CO	0.0	0.3	0.0	0.0	0.0	0.3
NOx	0.0	1.6	0.0	0.0	0.0	1.6

The above table shows that the construction of the new equipment will result in a potential VOC

emissions total greater than 25 tons per year. Therefore, a construction permit is necessary, and will be subject to the provisions of 326 IAC 2-1-3.2, Enhanced New Source Review. The source's issued Federally Enforceable State Operating Permit (FESOP), will require a significant modification to incorporate the Enhanced New Source Review (ENSR).

Changes

Technical Support Document (TSD):

Due to the new equipment construction, the original Technical Support Document is revised as follows (changes are bolded, and deletion are strike-through for emphasis):

1. Total PTE on page 2 of 13 of the TSD is revised as follows:

Total PTE

PTE is defined as "the maximum capacity of a stationary source to emit a pollutant under its physical and operation design".

Pollutant	PTE (tons/year)
PM	417 133.4
PM-10	417 133.4
SO ₂	0.004
VOC	64.7 191.0
CO	0.124 0.424
NO _x	0.594 2.2

The potential to emit (as defined in the Indiana Rule) of PM-10 **and Volatile Organic Compounds (VOC)** are greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7-1.

Limited PTE

The modification will also result in the sourcewide VOC emissions greater than 100 tons per year. Based on this fact, the source PTE will be limited as follows:

~~The source has accepted a federally enforceable PM-10 limit of 99 tons per year.~~

Process/Facility	Limited PTE, (tons/year)						
	PM	PM-10	SO2	VOC	CO	NOx	HAPs
Storage/Handling	33.6	33.6	0	0	0	0	0
Extruder Line 1	22.9 7.3	22.9 7.3	0	38.4 9.8	0	0	0
Extruder Line 2	7.3	7.3		9.8			
Laminator Line 1	5.37 1.8	5.37 1.8	0	40.0 24.0	0	0	0
Laminator Line 2	1.8	1.8		24.0			
Laminating Process							
Printer EU-09	0	0	0	40.0 5.6	0	0	0
Printer EU-11				14.8			
Printing Operations							
Wash Coater #2	0	0	0	8.1			
New Plastic Film Mixing Line	15.4	15.4		0	0	0	0
Insignificant Activities	0.074 0.033	0.074 0.033	0.004 0.002	5.53 2.6	0.124 0.06	0.594 0.27	0.110 0.05
Total Emissions	64.9 67.2	64.9 67.2	0.004	64.7 99.0	0.06	0.27	0.05

Limited PTE Calculations:

(a) Extruder Line 1 VOC Limit = $\frac{19.2 \text{ ton/yr} * 99 \text{ ton/yr}}{190.99 \text{ ton/yr}}$
 = 9.8 ton/yr

Raw material limit = $\frac{9.8 \text{ ton/yr} * 1020 \text{ lb/hr max. mat'l compd.}}{19.2 \text{ ton/yr}}$
 = 521 lb^{mat'l compd}/hr * 8760 hr/yr
 = 4,563,960 lb/yr

(b) Extruder Line 2 VOC Limit = $\frac{19.2 \text{ ton/yr} * 99 \text{ ton/yr}}{190.99 \text{ ton/yr}}$
 = 9.8 ton/yr

Raw material limit	=	$\frac{9.8 \text{ ton/yr} * 1020 \text{ lb/hr max. mat'l cmpd.}}{19.2 \text{ ton/yr}}$
	=	521 lb ^{mat'l cmpd} /hr * 8760 hr/yr
	=	4,563,960 lb/yr
(c) Printer EU-09 input VOC Limit	=	$\frac{10.8 \text{ ton/yr} * 99 \text{ ton/yr}}{190.99 \text{ ton/yr}}$
	=	5.6 ton/yr
(d) New Printer EU-11 input VOC Limit	=	$\frac{28.6.1 \text{ ton/yr} * 99 \text{ ton/yr}}{190.99 \text{ ton/yr}}$
	=	14.8 ton/yr
(e) Wash Coater #2	=	$\frac{15.53 \text{ ton/yr} * 99 \text{ ton/yr}}{190.99 \text{ ton/yr}}$
	=	8.1 ton/yr
(f) Laminators 1 and 2 Limit	=	See calculation on page 3 of this Addendum
(g) Insignificant Activities	=	$\frac{\text{Pot'l pollutant emissions} * \text{VOC Limit}}{\text{VOC Pot'l. Emissions}}$

Methodology:

$$\text{VOC Limit} = \frac{\text{Process Pot'l. VOC Emissions, ton/yr} * 99 \text{ tons of VOC/yr, limit sourcewide}}{\text{Total Sourcewide Pot'l. VOC Emissions, ton/yr}}$$

2. Page 4 of 13 on the **State Rule Applicability** of the original TSD, the applicability of 326 IAC 6-2-4 changes as follows:

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The following indirect heating units are subject to 326 IAC 6-2-4:

- (a) One (1) 2.7 mmBtu/hr natural gas-fired boiler;
- (b) Proposed one (1) 2.0 mmBtu/hr natural gas-fired boiler; and
- (c) Proposed two (2) 0.75 mmBtu/hr indirect fired heaters.

The PM limit from these units shall be determined using below equation:

$$\begin{aligned} \text{Pt} &= 1.09 / \text{Q}^{0.26} \\ &= 0.68 \text{ lb/mmBtu} \end{aligned}$$

This limit shall in no case exceed 0.6 lb/mmBtu for each unit.

where: Pt = Pounds of PM per mmBtu heat input
 Q = Total source maximum operating capacity rating in mmBtu/hr
 = 6.2 mmBtu/hr

~~is subject 326 IAC 6-2 (PM Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4(a), the total source maximum operating capacity rating is less than 10 MMBTU per hour, the allowable pounds per million BTU heat input value shall~~

~~be limited to 0.6. The 0.6 lb/mmBtu PM allowable emissions for the 2.7 mmBtu/hr boiler ~~This~~ correlates to an allowable PM-10 emissions of 7.1 tons per year. The 0.6 lb/mmBtu PM allowable emissions for the 2.0 mmBtu/hr boiler correlates to an allowable PM emission of 5.25 tons per year. The 0.6 lb/mmBtu PM allowable for the two (2) 0.75 mmBtu/hr boiler correlates to an allowable PM-emission of 1.9 tons per year each.~~

All the boilers are in compliance with this rule, since their potential PM emissions are each less than the corresponding PM allowable.

~~The potential PM-10 emissions (0.071 tons per year) from this boiler are less than the calculated allowable PM-10 emissions (7.1 tons per year), and therefore, this boiler is in compliance with 326 IAC 6-2.~~

3. Page 5 of 13 on the **State Rule Applicability** of the original TSD, the applicability of 326 IAC 6-2-3 are changed as follows:

326 IAC 6-3-2 (Particulate Emission Limitations for Process Operations)

This rule establishes emission limitations for particulate emissions from process operations. The process operations at this source applicable to this rule include the storage silos, mixing operations, extrusion lines, and the laminating process. The potential controlled PM emissions (28.9 tons per year) from the process operations are less than the calculated allowable PM emissions (61.9 tons per year), and therefore, the process operations are in compliance with this rule.

The PM emissions limitation from the proposed equipment under 326 IAC 6-3-2 shall be limited as follows (PM emissions are equivalent to PM10):

	Process Facility	Stack ID	Throughput Limits (tons/hr)	Emission Factors	PM-10 Emission Limits (lbs/hr)
Existing Equipment	Resin Powder Storage Silo/Transfer System	V1	0.44	13 lb/ton	2.37
	CaCO3 Storage Silo/Transfer System	V2	0.29	13 lb/ton	1.79
	Plastic Film Mixing Line/Granulators, EU-05	V3	0.794	0.6 lb/ton	3.52
	Extrusion Unit, EU-06	S4	0.261	0.00232 lb/lb	1.66
	Extrusion Unit, EU-07	S5	0.261	0.00232 lb/lb	1.66
	Laminator, EU-08	S6	843*	0.0005 lb/yd	0.42
Proposed Equipment	Plastic Film Mixing Line, EU-10	V3	0.794	0.6 lb/ton	3.52
	Laminator, EU-12	S8	843*	0.0005 lb/yd	0.42
	TOTAL				15.4

* this throughput limit is measured as yards of PVC sheet/hr
1 yard of PVC sheet = 15 ounces
1 ounce = 16 lb

The above PM Emission limits shall be demonstrated using each corresponding Emission Factor to calculate the emissions.

4. **326 IAC 8-1-6 (General Reduction Requirements)**
The new Laminator, EU-12 is subject to 326 IAC 8-1-6 (General Reduction) since it is not a vinyl coater, and its VOC potential emissions of 51.2 tons/yr is greater than 25 tons/yr.

The source has requested a limit in the throughput to limit the VOC emissions to 24 tons/yr. The limit is calculated as follows:

$$\begin{aligned} 24 \text{ tons/yr limit} * 2000 \text{ lb/ton} * \text{yd}/0.0065 \text{ lb} * \text{yr}/8760 \text{ hr} &= 843 \text{ yard/hour} \\ 843 \text{ yd/hr} * 8760 \text{ hr/yr} &= 7,384,680 \text{ yds/yr} \end{aligned}$$

5. *The original throughput of 352 yd/hr for the existing Laminator EU-08 is incorrect. The correct throughput is 1,440 yd/hr. A re-calculation is made as follows:*

$$\begin{aligned} 1,440 \text{ yd/hr} * 8760 \text{ hr/yr} &= 12,614,400 \text{ yd/yr} * 0.0065 \text{ lb VOC/yd} * \text{ton}/2000 \text{ lb} \\ &= 40.99 \text{ tons VOC/ yr} \end{aligned}$$

This laminator is limited to 24 ton/yr to avoid the applicability of 326 IAC 8-1-6. The limit is calculated as follows:

$$\begin{aligned} 24 \text{ tons/yr limit} * 2000 \text{ lb/ton} * \text{yd}/0.0065 \text{ lb} * \text{yr}/8760 \text{ hr} &= 843 \text{ yard/hour} \\ 843 \text{ yd/hr} * 8760 \text{ hr/yr} &= 7,384,680 \text{ yds/yr} \end{aligned}$$

6. *Page 5 of 13 on the **State Rule Applicability** of the original TSD, the applicability of 326 IAC 8-2-11 (Surface Coating Emission Limitations for Fabric and Vinyl Coating) are changed as follows:*

326 IAC 8-2-11 (Surface Coating Emission Limitations for Fabric and Vinyl Coating)

- (a) According to this rule, this source must reduce VOC emissions from the coating applicators of the printing operation, **EU-09** to no more than 4.8 lbs VOC per gallon of coating, excluding water. Information provided by the source indicates that the worst-case, as-applied coating for the printing operation, **EU-09** has a VOC content of 3.35 lbs per gallon coating, and therefore, is in compliance with this rule. According to 326 IAC 8-2-11, the plastisol application cannot be used to bubble emissions with the vinyl printing operations. The VOC emissions from the plastisol application at this source are less than 25 tons per year and therefore 326 IAC 8-1-6 does not apply.

- (b) **The proposed 4 color printing heads rotogravure press, EU-11 shall be subject to 326 IAC 8-2-11, which mandates a VOC limit to the coatings used to 4.8 pounds per gallon less water. This press is in compliance with this limit having a VOC content of 0.73 pounds per gallon less water.**
- (c) **The proposed Wash Coater #2 EU-11 shall be subject to 326 IAC 8-2-11, which mandates a VOC limit to the coatings used to 4.8 pounds per gallon less water. This coater is in compliance with this limit having a VOC content of 0.73 pounds per gallon less water.**

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

Methanol is emitted at a rate of 10 ton/yr. The source has been limited to a single HAP emission of 9 ton/yr and 24 tons for any combined HAPs per year.

Conclusion

The modifications of this source will be subject to the conditions of the attached proposed **Significant FESOP Modification/ENSR SMF/ENSR-043-10076-00039.**

Changes Proposed

FESOP Permit

This new construction will result in a Significant Modification to FESOP 043-6294-00039, issued on August 12, 1997 and it will be modified as follows (changes are bolded and deletion are strike-through for emphasis):

1. *Page 4 of 26, Section A.2 Emission Units and Pollution Control Summary, is revised to read as follows:*
 - (a) One (1) PVC resin powder storage silo, EU-01, with a maximum storage capacity of 78.8 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V1. The material is conveyed via one (1) PVC resin powder transfer system, EU-03, at a maximum throughput capacity of 3,883 tons per year. This system exhausts to stack vent V3;
 - (b) One (1) calcium carbonate (CaCO₃) storage silo, EU-02, with a maximum storage capacity of 61 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V2. The material is conveyed via one (1) CaCO₃ transfer system, EU-04, with a maximum throughput capacity of 2,590 tons per year. This system exhausts to stack vent V4;

- (c) ~~One (1)~~ **Two (2)** plastic film mixing lines, identified as EU-05, **and EU-10. Each line** consists ~~ing~~ of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scales, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. These lines also consists of a liquid scale with a maximum throughput of 4,800 pounds per hour and a liquid mixer with a maximum throughput of 720 pounds per hour and exhausts to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, **located in two separate buildings** that exhaust to stacks S4 and S5, respectively. ~~The maximum capacity of Each extrusion unit is limited to 521 pounds of materials compounded per hour;~~
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/MM in²) of PVC sheet;
- (f) **One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 lb/MM in² of PVC sheet;**
- (g) **One (1) Wash Coater #2, with a line speed of 150 feet per minute (ft/min), and a coating width of 57 inches;**
- (h) ~~Two (2)~~ **Two (2)** laminators, identified as EU-08, **and EU-12. Each laminator has a limited production rate of 14.0 yds laminated film/min.**

Section A.3, Insignificant Activities, will also be revised to include the 3 natural gas-fired combustion units, as follows:

- (a) one (1) natural gas-fired boiler rated at 2.7 mmBtu per hour;
- (b) one (1) natural gas-fired boiler rated at 2.0 mmBtu/hr,**
- (c) two (2) natural gas-fired indirect heaters rated at 0.75 mmBtu/hr each,**
- (d) one (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (e) three (3) granulators that chop waste film and recirculate to the mixing line;
- (f) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (g) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (h) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (i) closed loop heating and cooling systems;
- (j) natural draft cooling towers not regulated under a NESHAP;
- (k) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (l) paved and unpaved roads and parking lots with public access; and
- (m) blowdown for sight glass, boiler, compressors, pumps, and cooling towers.

2. *Page 19 of 26, Section D.1, project description's table of the issued FESOP is revised to reflect the changes in the above item 1, as follows:*

A plastic film manufacturing line consisting of:

- (a) One (1) PVC resin powder storage silo, EU-01, with a maximum storage capacity of 78.8 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V1. The material is conveyed via one (1) PVC resin powder transfer system, EU-03, at a maximum throughput capacity of 3,883 tons per year. This system exhausts to stack vent V3;
- (b) One (1) calcium carbonate (CaCO₃) storage silo, EU-02, with a maximum storage capacity of 61 tons. This silo is equipped with a baghouse for particulate matter control and exhausts to stack vent V2. The material is conveyed via one (1) CaCO₃ transfer system, EU-04, with a maximum throughput capacity of 2,590 tons per year. This system exhausts to stack vent V4;
- (c) **Two One (1) (+ 2) plastic film mixing lines, identified as EU-05, and EU-10. Each line** consists ~~ing~~ of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scales, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. These lines also consists of a liquid scale with a maximum throughput of 4,800 pounds per hour and a liquid mixer with a maximum throughput of 720 pounds per hour and exhausts to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, **located in two separate buildings** that exhaust to stacks S4 and S5, respectively. ~~The maximum capacity of Each extrusion unit is~~ **limited to 521** pounds of materials compounded per hour;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/MM in²) of PVC sheet;
- (f) **One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 lb/MM in² of PVC sheet;**
- (g) **One (1) Wash Coater #2, with a line speed of 150 feet per minute (ft/min), and a coating width of 57 inches;**
- (h) **Two One (1) (+ 2) laminators, identified as EU-08, and EU-12. Each laminator has a limited production rate of 14.0 yds laminated film/min.**

3. *Page 19 of 26, Section D.1.1 of the issued FESOP is revised to incorporate the new equipment and read as follows:*

D.1.1 Particulate Matter

That pursuant to 326 IAC 6-3 (Process Operations), the following facilities of the plastic film manufacturing plant shall not exceed the following associated particulate matter emissions:

	Process Facility	Stack ID	Allowable PM Emission (lbs/hr)
Existing Equipment	Resin Powder Storage Silo/Transfer System	V1	2.37
	CaCO3 Storage Silo/Transfer System	V2	1.79
	Plastic Film Mixing Line/Granulators, EU-05	V3	3.52
	Extrusion Unit, EU-06	S4	1.66
	Extrusion Unit, EU-07	S5	1.66
	Laminator, EU-08	S6	0.42
Proposed Equipment	Plastic Film Mixing Line, EU-10	V3	3.52
	Laminator, EU-12	S8	0.42
	TOTAL		15.4

4. D.1.2 Page 20 of 26, Section D.1.2 of the issued FESOP is revised to incorporate the new equipment and read as follows:

	Process Facility	Stack ID	Throughput Limits (tons/hr)	Emission Factors	PM-10 Emission Limits (lbs/hr)
Existing Equipment	Resin Powder Storage Silo/Transfer System	V1	0.44	13 lb/ton	2.37
	CaCO3 Storage Silo/Transfer System	V2	0.29	13 lb/ton	1.79
	Plastic Film Mixing Line/Granulators, EU-05	V3	0.794	0.6 lb/ton	3.52
	Extrusion Unit, EU-06	S4	0.51	0.00232 lb/lb	1.66
	Extrusion Unit, EU-07	S5	0.51	0.00232 lb/lb	1.66
	Laminator, EU-08	S6	843*	0.0005 lb/yd	0.42
Proposed Equipment	Plastic Film Mixing Line, EU-10	V3	0.794	0.6 lb/ton	3.52
	Laminator, EU-12	S8	843*	0.0005 lb/yd	0.42
	TOTAL				15.4

5. Page 20 of 26, Section D.1.4 of the issued FESOP is revised to incorporate the new press and read as follows:

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-11]

That pursuant to 326 IAC 8-2-11 (Fabric and Vinyl Coating VOC Limitations), the VOC content of the coatings used from the rotogravure presses EU-09 **and EU-11 and Wash Coater #2** shall be limited to 4.8 pounds of VOC per gallon of coating less water delivered to the applicator.

6. *The following condition is added in the issued FESOP and numbered D.1.6.*

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the two (2) Laminators shall be limited as follows:

(a) **Laminator EU-08 shall be limited to a production rate of 7,358,400 yards of film per 12-month period rolled on a monthly basis. The limit on this laminator will restrict the VOC emissions to 24 tons per 12-month period rolled on a monthly basis. Compliance with this limit will make 326 IAC 8-1-6 (General Reduction) requirements not applicable in this case.**

(b) **The new Laminator, EU-12 shall be limited to a production rate of 7,358,400 yards of film per 12-month period rolled on a monthly basis. The limit on this laminator will restrict the VOC emissions to 24 tons per 12-month period rolled on a monthly basis. During its first twelve (12) months of operation, its production rate shall be limited such that the total production rate divided by the accumulated months of operation shall not exceed 613,200 yards per month.**

Compliance with this limit will make 326 IAC 8-1-6 (General Reduction) requirements not applicable in this case.

A reporting form is generated for condition D.1.6, and numbered accordingly.

7. *A correction was made to the original VOC calculations for the existing lamination line, EU-08 from 10 tons/yr to 40.99 tons/yr. This correction has made the sourcewide VOC emissions above 100 tons/year. The source VOC material will be limited to restrict the VOC emissions to 99 ton/yr.*

All condition in the issued FESOP that require daily recordkeeping of the limits will be changed to monthly rolling averaging time. The following condition is added in the issued FESOP and numbered D.1.7. Subsequent conditions are renumbered accordingly.

D.1.7 Volatile Organic Compounds [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the following facilities shall be limited as follows:

- (a) **The materials compounded from Extruder Line 1, EU-06 shall be limited to 4,563,960 pounds per 12-month period , rolled on a monthly basis.**
- (b) **The materials compounded from Extruder Line 2, EU-07 shall be limited to 4,563,960 pounds per 12-month period, rolled on a monthly basis.**
- (c) **The VOC input usage from the new Rotogravure Press, shall be limited to 14.8 tons per 12-month period rolled on a monthly basis. During the first twelve (12) months of operation of this press, its input VOC usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 1.9 tons per month.**
- (d) **The VOC input usage from the new Wash Coater #2, shall be limited to 8.1 tons per 12-month period rolled on a monthly basis. During the first twelve (12) months of operation of this coater, its input VOC usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 0.675 tons per month.**
- (e) **The VOC input usage from the existing Rotogravure Press, EU-09 shall be limited to 5.6 tons per 12-month period rolled on a monthly basis.**

Compliance with conditions D1.7(a) through (e) and D1.6 (a) and (b) shall make 326 IAC 2-7, Part 70 Permit Requirements not applicable.

A reporting form is generated for condition D.1.7, and numbered accordingly.

8. *To demonstrate compliance with the limit in condition D.1.7, the following condition is added under Compliance Monitoring Requirements and numbered D.1.13:*

D.1.13 Volatile Organic Compounds

The raw material limit in Condition D.1.6 and D.1.7 will result in an equivalent VOC emissions of 99 tons per 12 month. The emissions shall be calculated using the emission factor of 0.0043 lb of VOC/ lb compounded from the two extruders, EU-06 and EU-07, and emission factor 0.0065 lb VOC/yard of film from the two lamination lines, EU-8 and EU-12.

9. *Page 22 of 26, Section D.1.12 on the issued FESOP is revised and re-numbered D1.13 as follows:*

D.1.13 Record Keeping Requirements

- (a) **To document compliance with Condition D.1.8, the Permittee shall maintain records of daily visible emission notations of each stack exhaust.**

- (b) To document compliance with Condition D.1.11, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all corrective actions implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchase orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (c) **To document compliance with Condition D.1.6, the Permittee shall maintain the monthly film usage from Laminators EU-08 and EU-12.**
 - (d) **To document compliance with Condition D.1.7, the Permittee shall maintain the monthly amount of material compounded and extruded, and daily and monthly amount of ink usage from presses EU-09 and EU-11.**
 - ~~(e)~~ All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
10. *Page 23 of 26 Section D.2, project description table of the issued FESOP is revised to reflect the additional one (1) 2.0 mmBtu/hr small boiler, and two (2) indirect-fired heaters with a capacity of 0.75 mmBtu/hr each and numbered (a) and (b) respectively. All subsequent equipment description are renumbered accordingly as follows:*

Insignificant Activities:

- (a) one (1) natural gas-fired boiler rated at 2.7 mmBtu per hour;
- (b) one (1) natural gas-fired boiler rated at 2.0 mmBtu/hr,
- (c) two (2) natural gas-fired indirect heaters rated at 0.75 mmBtu/hr each,
- (d) one (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (e) three (3) granulators that chop waste film and recirculate to the mixing line;
- (f) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (g) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (h) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (i) closed loop heating and cooling systems;
- (j) natural draft cooling towers not regulated under a NESHAP;
- (k) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (l) paved and unpaved roads and parking lots with public access; and
- (m) blowdown for sight glass, boiler, compressors, pumps, and cooling towers.

11. *Page 23 of 26 , Condition D.2.1 of the issued FESOP is revised to limit the new 2.0 mmBtu/hr small boiler, and two (2) indirect-fired heaters each has a capacity of 0.75 mmBtu/hr as follows:*

D.2.1 Particulate Matter

That pursuant to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), particulate matter (PM) emissions from the 2.7 million BTU/hour boiler, **the new 2.0 mmBtu/hr boiler and the new two (2) indirect-fired heaters** shall **each** be limited to 0.6 pound per million BTU heat input.

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

Addendum to the
Technical Support Document for First Significant Modification to the Federally Enforceable
State Operating Permit (FESOP) and Enhanced New Source Review (ENSR)

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

**F-043-6294, Plt ID-043-00039
Amendment No. SMF/ENSR 043-10076-00039**

On October 7, 1998, the Office of Air Management (OAM) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Product Specialties, Inc. has applied for a Significant Modification to the Federally Enforceable State Operating Permit (FESOP) in order to incorporate the proposed new equipment construction under the ENSR that are used in the manufacture of polyvinyl chloride (PVC) film and fabric backed PVC wall covering. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 9, 1998, Product Specialties, Inc. had submitted comments on the proposed FESOP Modification. The summary of the comments is as follows (changes are bolded and deletion are strike through for emphasis):

Comment 1: Section A.2(h) on Page 4 of 26, and D.1(h) page 19 of 26 of the proposed FESOP Modification/ENSR, limit each Laminator to 14 yards laminated film per minute. The short term limit of 14 yards per minute will impose unacceptable restriction on these process operations.

Response 1: Section A.2(h) on Page 4 of 26, and D.1(h) page 19 of 26 of the proposed FESOP Modification/ENSR are just merely describing the project and are not meant to put a short term limit on each Laminator to 14 yards per minute. Hence, Section A.2(h) on Page 4 of 26, and D.1(h) page 19 of 26 are revised in the FESOP Modification/ENSR using the limits specified in D.1.6 as follows:

Section A.2(h)

(h) Two (2) laminators, identified as EU-08, and EU-12. Each laminator has a limited production rate of ~~14.0~~ **7,384,680** yds laminated film/~~min~~ **year**.

Section D.1

A plastic film manufacturing line consisting of:

- (a) ****
through
- (g) ****
- (h) Two (2) laminators, identified as EU-08, and EU-12. Each laminator has a limited production rate of ~~14.0~~ **7,384,680** yds laminated film/~~min~~ **year**.

**** (means no change)

The affidavit is also revised to reflect the above changes.

Comment 2: The particulate matter limits in D.1.1 and D.1.2 of the proposed FESOP Modification/ENSR are based on the current limitation of 14 yards per minute. We are requesting that these short term limits be increased to each laminator's maximum rated capacity of 1800 yards per hour.

Response 2: Section D.1.1 and D.1.2 on page 19 of 26 of the proposed FESOP Modification/ENSR is revised using the maximum hourly rated capacity of each laminator to 1800 yards per hour as a shorter term limit. Since each laminator has a yearly limit of 7,384,680 yards, this yearly limit guarantees that their PM10 emissions would not contribute to the exceedance of the whole source's PM10 emissions greater than 100 tons per year. Also, the total source's PM10 emissions limit, including these changes will only amount to 16.36 pounds per hour, which is equivalent to 71.6 tons per year, assuming the source is operating constantly at the same throughput level. Therefore, Condition D.1.1 and D.1.2 are revised as follows:

D.1.1 Particulate Matter

Pursuant to 326 IAC 6-3 (Process Operations), the following facilities of the plastic film manufacturing plant shall not exceed the following associated particulate matter emissions:

Process Facility	Stack ID	Allowable PM Emission (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	2.37
CaCO3 Storage Silo/Transfer System	V2	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	3.52
Extrusion Unit, EU-06	S4	1.66
Extrusion Unit, EU-07	S5	1.66
Laminator, EU-08	S6	0.42 0.9
Plastic Film Mixing Line, EU-10	V3	3.52

Laminator, EU-12	S8	0.42 0.9
TOTAL		45.4 16.36

D.1.2 Particulate Matter < 10 microns (PM-10)

Pursuant to 326 IAC 2-8 (FESOP Program), the following facilities of the plastic film manufacturing plant shall not exceed the following associated material throughput rates and PM-10 emissions:

Process Facility	Stack ID	Throughput Limits (tons/hr)	Emission Factors	PM-10 Emission Limits (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	0.44	13 lb/ton	2.37
CaCO3 Storage Silo/Transfer System	V2	0.29	13 lb/ton	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	0.794	0.6 lb/ton	3.52
Extrusion Unit, EU-06	S4	0.51	0.00232 lb/lb	1.66
Extrusion Unit, EU-07	S5	0.51	0.00232 lb/lb	1.66
Laminator, EU-08	S6	843* 1800*	0.0005 lb/yd	0.42 0.9
Plastic Film Mixing Line, EU-10	V3	0.794	0.6 lb/ton	3.52
Laminator, EU-12	S8	843* 1800*	0.0005 lb/yd	0.42 0.9

* this throughput limit is measured as yards of PVC sheet/hr
 1 yard of PVC sheet = 15 ounces
 1 ounce = 16 lb

The above PM emission limits shall be demonstrated using each corresponding Emission Factor to calculate the emissions. Therefore, the requirements of 326 IAC 2-7 do not apply.

IDEM, also included page 3 among the Pages Affected from the issued FESOP.

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

Company Name: Product Specialties, Inc.
Address City IN Zip: 2073 McDonald Ave., New Albany, IN 47150
SMF/ENSR: 043-10076
Pit ID: 043-00039
Reviewer: Aida P. De Guzman
Date: Sept. 15, 1998

THROUGHPUT							
Press I.D.	MAXIMUM LINE SPEED FEET MIN	CONVERT FEET TO INCHES	MAXIMUM PRINT WIDTH INCHES	60 MIN HOUR	8760 HR YEAR	1/1000000	MMin ² /YEAR
#2 Printer/#2 Wash Coater	150	12	57	60	8760	1000000	53927

INK VOCS						
Ink Name Press Id	Maxium Coverage lbs/ MMin ²	Weight % Volatiles*	Flash Off %	Through Put MMin ² / Year	Tons 2000 lbs	Tons Year
#2 Printer Decorative Coating	14.4	2%	100.00%	53927	2000	7.14 4 colors printing head in 1 printer 28.60
#2 Wash Coater Decorative Coating	28.8	2%	100.00%	53927	2000	15.53

Total VOC	44.10	Ton/yr
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*VOC = Maximum Coverage pounds per MMin² * Weight % volatiles (weight % of water & organics - weight % of water = weights % organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year
 METHODOLOGY

Throughput = Maxium line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin² per Year

VOC = Maximum Coverage pounds per MMin² * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPE OF PRINTERS HAVE A FLASH OFF OF 100%

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10
Commercial Boiler**

**2 mmBtu/hr boiler (vinyl line)
2 @ 0.75 mmBtu/hr, 1 for the printer
& 1 is for the wash coater**

**Company Name: Product Specialties, Inc.
Address City IN Zip: 2073 McDonald Ave., New Albany, IN 47150
SMF/ENSR: 043-10076
Plt ID: 043-00039
Reviewer: Aida P. De Guzman
Date: September 15, 1998**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.0	17.5
1.5	13.1

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	12.0	12.0	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.1	0.1	0.0	0.9	0.0	0.2
Potential Emissions (ton/yr) for 2 (.75)	0.1	0.1	0.0	0.7	0.0	0.1

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

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

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