

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

INDIANA DEPARTMENT OF ENVIRONMENTAL 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:

## 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 NOx  
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 (CaCO<sub>3</sub>) 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) CaCO<sub>3</sub> 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) plastic film mixing line, identified as EU-05, consisting of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scale, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts of stack vent V3. This line 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, that exhaust to stacks S4 and S5, respectively. The maximum capacity of each extrusion unit is 1,750 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 of PVC sheet; and
- (f) One (1) laminator, identified as EU-08, with a maximum production rate of 24 yards of laminated film per minute.

### 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) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) three (3) granulators that chop waste film and recirculate to the mixing line;
- (d) one (1) plastisol mixing line with emissions exhausting to stack vent V3;

- (e) VOC and HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (f) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (g) closed loop heating and cooling systems;
- (h) natural draft cooling towers not regulated under a NESHAP;
- (i) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (j) paved and unpaved roads and parking lots with public access; and
- (k) 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 365 day period. Emissions of hazardous air pollutants (HAPs) from the entire source shall not exceed 9 tons of any individual HAP per 365 day period or 24 tons of any combination of HAPs per 365 day 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) 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.

- (b) Unless otherwise specified in this permit, any notice, report, or other submission 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) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (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.
- (e) 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.

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.

## 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 (CaCO<sub>3</sub>) 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) CaCO<sub>3</sub> 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) plastic film mixing line, identified as EU-05, consisting of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scale, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. This line 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, that exhaust to stacks S4 and S5, respectively. The maximum capacity of each extrusion unit is 1,750 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 of PVC sheet; and
- (f) One (1) laminator, identified as EU-08, with a maximum production rate of 24 yards of laminated film per minute.

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

#### D.1.1 Particulate Matter

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

Process Facility	Stack ID	Allowable PM Emissions (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	2.37
CaCO <sub>3</sub> Storage Silo/Transfer System	V2	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	3.52
Extrusion Unit, EU-06	S4	2.60
Extrusion Unit, EU-07	S5	2.60
Laminator, EU-08	S6	1.23
Total Allowable PM Emissions, lb/hr:		14.1

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

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

Process Facility	Stack ID	Throughput Limits (tons/hr)	PM-10 Emission Limits (lbs/hr)
Resin Powder Storage Silo/Transfer System	V1	0.44	2.37
CaCO3 Storage Silo/Transfer System	V2	0.29	1.79
Plastic Film Mixing Line/Granulators, EU-05	V3	0.794	3.52
Extrusion Unit, EU-06	S4	0.51	2.60
Extrusion Unit, EU-07	S5	0.51	2.60
Laminator, EU-08	S6	352*	1.23
Total PM-10 Emission Limit, lb/hr:			14.1

\* this throughput limit is measured as yards of PVC sheet/hr

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

**D.1.3 Visible Emissions**

That 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]**

That pursuant to 326 IAC 8-2-11 (Fabric and Vinyl Coating VOC Limitations), the VOC content of the coating from the rotogravure press 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**

That the hazardous air pollutant emissions shall be limited as follows:

- (a) A single hazardous air pollutant (HAP) emissions shall not exceed 9 tons/year.
- (b) Any combination of HAPs emissions shall not exceed 24 tons/year.

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

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

**D.1.6 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.1.7 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.1.8 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.1.9 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.1.10 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.1.11 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.1.6.

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

**D.1.12 Record Keeping Requirements**

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of each stack exhaust.
- (b) To document compliance with Condition D.1.8, 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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## 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) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) three (3) granulators that chop waste film and recirculate to the mixing line;
- (d) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (e) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (f) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (g) closed loop heating and cooling systems;
- (h) natural draft cooling towers not regulated under a NESHAP;
- (i) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (j) paved and unpaved roads and parking lots with public access; and
- (k) 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 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)
<b>9</b> 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)
<b>9</b> Permit Has No Content Limitations for this Parameter.
Comments:

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

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

**Source Background And Description**

**Source Name:** Product Specialties, Inc.  
**Source Location:** 2073 McDonald Avenue, New Albany, Indiana 47150  
**County:** Floyd County  
**Operation Permit No.:** F043-6294-00039  
**Permit Reviewer:** mmw

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Product Specialties, Inc., relating to the production of unsupported polyvinyl chloride (PVC) film and fabric backed PVC wallcovering for the commercial market. The key operation facilities at the source include compounding, extrusion, rotogravure printing and lamination.

The source consists of the following unpermitted facilities/units:

- (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 (CaCO<sub>3</sub>) 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) CaCO<sub>3</sub> 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) plastic film mixing line, identified as EU-05, consisting of a dry scale, scale transfer, mixer transfer, cool blend transfer, tote transfer, and ribbon blend transfer. The dry scale, scale transfer and mixer transfer operations shall be equipped with a baghouse that exhausts to stack vent V3. This line 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, that exhaust to stacks S4 and S5, respectively. The maximum capacity of each extrusion unit is 1,750 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 of PVC sheet; and
- (f) One (1) laminator, identified as EU-08, with a maximum production rate of 24 yards of laminated film/min.

The source also consists of the following insignificant activities:

- (a) One (1) natural gas-fired boiler rated at 2.7 MMBtu per hour;
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) Three (3) granulators that chop waste film and recirculate to the mixing line;

- (d) One (1) plastisol mixing line with emissions exhausting to stack vent V3;
- (e) VOC and HAP storage vessels for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (f) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (g) Closed loop heating and cooling systems;
- (h) Natural draft cooling towers not regulated under a NESHAP;
- (i) Replacement or repair of bags in baghouses, and filters in other air filtration equipment;
- (j) Paved and unpaved roads and parking lots with public access; and
- (k) Blowdown for sight glass, boiler, compressors, pumps, and cooling towers.

### Enforcement Issue

IDEM is aware that the source has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed FESOP will also satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the FESOP 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 FESOP application for the purposes of this review was received on July 19, 1996. Additional information was obtained on September 10, October 14, and October 16, 1996.

### Potential to Emit (PTE) Calculations

See Appendix A Potential to Emit (PTE) Calculation for detailed calculations.

### Total PTE

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

Pollutant	PTE (tons/year)
PM	117
PM-10	117
SO <sub>2</sub>	0.004
VOC	64.7
CO	0.124
NO <sub>x</sub>	0.591

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

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

A source with a “potential to emit” high enough to make it a “major source” but whose actual emissions are below the Part 70 emission levels may elect to avoid the Part 70 Operating Permit Program by agreeing to accept a permit with federally enforceable limits that restrict its PTE to below the major source emission levels. The permit containing these restrictions is called a Federally Enforceable State Operating Permit (FESOP).

**County Attainment Status**

The source is located in Floyd County.

Pollutant	Status
TSP	unclassifiable
PM-10	attainment
SO <sub>2</sub>	attainment
VOC	moderate
CO	attainment
NO <sub>2</sub>	moderate

**Limited PTE**

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

Process/Facility	Limited PTE, (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Storage/Handling	33.6	33.6	0	0	0	0	0
Extruder Lines	22.9	22.9	0	38.4	0	0	0
Laminating Process	5.37	5.37	0	10.0	0	0	0
Printing Operations	0	0	0	10.8	0	0	0
Insignificant Activities	0.071	0.071	0.004	5.53	0.124	0.591	0.110
Total Emissions	61.9	61.9	0.004	64.7	0.124	0.591	0.110

Attached Tables 1 to 4 summarize the permit conditions and requirements.

**Federal Rule Applicability**

40 CFR 60 Subpart DDD and 326 IAC 12 (Polymer Manufacturing)

This source is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.560 thru 60.566, Subpart DDD - Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry). Sources potentially regulated by this rule are those facilities involved in the manufacture of polypropylene, polyethylene, polystyrene, or ethylene terephthalate (poly). Product Specialties only purchases already manufactured resin to produce unsupported PVC film and fabric backed PVC wallcovering for the commercial market.

40 CFR 63 Subpart JJJ and 326 IAC 21 (Group IV Polymers and Resins)

This source is not subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR 63 Subpart JJJ: Group IV Polymers and Resins. Sources potentially regulated by this action are those facilities which manufacture one or more of the following thermoplastic resins: acrylonitrile butadiene styrene, styrene acrylonitrile, methyl methacrylate acrylonitrile butadiene styrene, methyl methacrylate butadiene styrene, polystyrene, poly or nitrile resins. Product Specialties purchases this manufactured resin to produce unsupported PVC film and fabric backed PVC wallcovering for the commercial market.

**State Rule Applicability**

326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source is located in Floyd County and emits more than 10 tons/yr VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4. A copy of the applicable rule will be enclosed with the permit.

326 IAC 2-8 (FESOP)

The following facilities of the plastic film manufacturing line shall not exceed the following associated PM-10 emissions:

Process Facility	Stack ID	PM-10 Emission Limits (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	2.60
Extrusion Unit, EU-07	S5	2.60
Laminator, EU-08	S6	1.23
Total PM-10 Emission Limit, lb/hr:		14.1

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

326 IAC 5-1 (Visible Emissions Limitations)

The visible emissions from the source shall not exceed an average of 40% opacity in 24 consecutive readings or 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

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

The 2.7 MMBTU/hr natural gas-fired boiler 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. This correlates to an allowable PM-10 emission limit of 7.1 tons per year. 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.

**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.

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

According to this rule, this source must reduce VOC emissions from the coating applicators of the printing operations 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 operations 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.

**326 IAC 8-3 (Degreasing Operation Limitations)**

According to this rule, cold cleaner organic solvent degreasing operations existing before January 1, 1980 are subject to 326 IAC 8-3-3. This source shall: 1) equip the cleaner with a cover and keep the unit covered whenever parts are not being handled in the cleaner; 2) equip the cleaner with a parts draining rack and allow the parts to drain for at least 15 seconds or until dripping ceases; 3) provide a permanent, conspicuous label summarizing the operating requirements; and 4) store waste solvent only in covered containers and not dispose or transfer the waste solvent in such a manner that greater than 20 percent of the waste solvent can evaporate into the atmosphere.

**Compliance Monitoring**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

The plastic film mixing line has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the plastic film mixing line stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across the baghouse controlling the plastic film mixing line, at least once daily when the plastic film mixing line is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 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.

These monitoring conditions are necessary because the baghouse for the mixing process must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

The storage silos have applicable compliance monitoring conditions as specified below:

- (a) Visible emissions notations of each storage silo stack exhaust shall be performed during the loading operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the baghouses for the storage silos must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

### **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) FESOP Application GSD-08.

None of these listed air toxics will be emitted from this source.

**Conclusion**

The operation of this unsupported polyvinyl chloride (PVC) film and fabric backed PVC wallcovering production line will be subject to the conditions of the attached proposed **FESOP No. F043-6294-00039**.

**Table 1**

<b>Stack/Vent ID:</b>		V1			
<b>Stack/Vent Dimensions:</b>		Ht: 39.5'	Dia: 1.1' x 1.1'	Temp: Ambient	Flow: 1050 acfm
<b>Emission Unit:</b>		Resin Silo and Transfer System			
<b>Date of Construction:</b>		1978			
<b>Alternative Scenario:</b>					
<b>Pollution Control Equipment:</b>		Baghouse			
<b>General Description of Requirement:</b>	PM Limits on Process Operations		PM-10 Limits to avoid Title V Program		
<b>Numerical Emission Limit:</b>	2.37		2.37		
<b>Regulation/Citation:</b>	326 IAC 6-3		326 IAC 2-8		
<b>Compliance Demonstration:</b>	Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping		Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping		
<b>PERFORMANCE TESTING</b>					
<b>Parameter/Pollutant to be Tested:</b>	n/a		n/a		
<b>Testing Method/Analysis:</b>	n/a		n/a		
<b>Testing Frequency/Schedule:</b>	n/a		n/a		
<b>Submittal of Test Results:</b>	n/a		n/a		
<b>COMPLIANCE MONITORING</b>					
<b>Monitoring Description:</b>					
<b>Monitoring Method:</b>					
<b>Monitoring Regulation/Citation:</b>					
<b>Monitoring Frequency:</b>					
<b>RECORD KEEPING</b>					
<b>Parameter/Pollutant to be Recorded:</b>	Visible PM Emissions	Pressure Drop of Baghouse	Visible PM Emissions	Pressure Drop of Baghouse	
<b>Recording Frequency:</b>	Daily	Every Shift	Daily	Every Shift	
<b>Submittal Schedule of Reports:</b>	n/a		n/a		
<b>REPORTING REQUIREMENTS</b>					
<b>Information in Report:</b>	n/a		n/a		
<b>Reporting Frequency/Submittal:</b>	n/a		n/a		
<b>Additional Comments:</b>	n/a		n/a		

**Table 2**

<b>Stack/Vent ID:</b>		V2			
<b>Stack/Vent Dimensions:</b>		Ht: 56'	Dia: 0.833'	Temp: Ambient	Flow: 1000 acfm
<b>Emission Unit:</b>		CaCO3 Silo and Transfer System			
<b>Date of Construction:</b>		1978			
<b>Alternative Scenario:</b>					
<b>Pollution Control Equipment:</b>		Baghouse			
<b>General Description of Requirement:</b>	PM Limits on Process Operations	PM-10 Limits to avoid Title V Program			
<b>Numerical Emission Limit:</b>	1.79	1.79			
<b>Regulation/Citation:</b>	326 IAC 6-3	326 IAC 2-8			
<b>Compliance Demonstration:</b>	Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping	Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping			
<b>PERFORMANCE TESTING</b>					
<b>Parameter/Pollutant to be Tested:</b>	n/a	n/a			
<b>Testing Method/Analysis:</b>	n/a	n/a			
<b>Testing Frequency/Schedule:</b>	n/a	n/a			
<b>Submittal of Test Results:</b>	n/a	n/a			
<b>COMPLIANCE MONITORING</b>					
<b>Monitoring Description:</b>					
<b>Monitoring Method:</b>					
<b>Monitoring Regulation/Citation:</b>					
<b>Monitoring Frequency:</b>					
<b>RECORD KEEPING</b>					
<b>Parameter/Pollutant to be Recorded:</b>	Visible Emissions	Pressure Drop of Baghouse	Visible Emissions	Pressure Drop of Baghouse	
<b>Recording Frequency:</b>	Daily	Every Shift	Daily	Every Shift	
<b>Submittal Schedule of Reports:</b>	n/a			n/a	
<b>REPORTING REQUIREMENTS</b>					
<b>Information in Report:</b>	n/a			n/a	
<b>Reporting Frequency/Submittal:</b>	n/a			n/a	
<b>Additional Comments:</b>	n/a			n/a	

**Table 3**

<b>Stack/Vent ID:</b>		V3			
<b>Stack/Vent Dimensions:</b>		Ht: 15'	Dia: 0.667'	Temp: Ambient	Flow: 680 acfm
<b>Emission Unit:</b>		Plastic Film Mixing Line			
<b>Date of Construction:</b>		1978			
<b>Alternative Scenario:</b>					
<b>Pollution Control Equipment:</b>		Baghouse			
<b>General Description of Requirement:</b>	PM Limits on Process Operations	PM-10 Limits to avoid Title V Program			
<b>Numerical Emission Limit:</b>	1.79	1.79			
<b>Regulation/Citation:</b>	326 IAC 6-3	326 IAC 2-8			
<b>Compliance Demonstration:</b>	Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping	Visible Emission Notations/Baghouse Maintenance and Inspections/Good Housekeeping			
<b>PERFORMANCE TESTING</b>					
<b>Parameter/Pollutant to be Tested:</b>	n/a	n/a			
<b>Testing Method/Analysis:</b>	n/a	n/a			
<b>Testing Frequency/Schedule:</b>	n/a	n/a			
<b>Submittal of Test Results:</b>	n/a	n/a			
<b>COMPLIANCE MONITORING</b>					
<b>Monitoring Description:</b>					
<b>Monitoring Method:</b>					
<b>Monitoring Regulation/Citation:</b>					
<b>Monitoring Frequency:</b>					
<b>RECORD KEEPING</b>					
<b>Parameter/Pollutant to be Recorded:</b>	Visible Emissions	Pressure Drop of Baghouse	Visible Emissions	Pressure Drop of Baghouse	
<b>Recording Frequency:</b>	Daily	Every Shift	Daily	Every Shift	
<b>Submittal Schedule of Reports:</b>	n/a			n/a	
<b>REPORTING REQUIREMENTS</b>					
<b>Information in Report:</b>	n/a			n/a	
<b>Reporting Frequency/Submittal:</b>	n/a			n/a	
<b>Additional Comments:</b>	n/a			n/a	

**Table 4**

<b>Stack/Vent ID:</b>	S4
<b>Stack/Vent Dimensions:</b>	Ht: 14'      Dia: 1.5'      Temp: 103 °F      Flow: 3600 acfm
<b>Emission Unit:</b>	Extruder EU-06
<b>Date of Construction:</b>	1978
<b>Alternative Scenario:</b>	
<b>Pollution Control Equipment:</b>	None
<b>General Description of Requirement:</b>	PM-10 Limits to avoid Title V Program
<b>Numerical Emission Limit:</b>	2.60 lbs PM-10/hr
<b>Regulation/Citation:</b>	326 IAC 2-8
<b>Compliance Demonstration:</b>	Visible Emission Notations/Good Housekeeping
<b>PERFORMANCE TESTING</b>	
<b>Parameter/Pollutant to be Tested:</b>	n/a
<b>Testing Method/Analysis:</b>	n/a
<b>Testing Frequency/Schedule:</b>	n/a
<b>Submittal of Test Results:</b>	n/a
<b>COMPLIANCE MONITORING</b>	
<b>Monitoring Description:</b>	
<b>Monitoring Method:</b>	
<b>Monitoring Regulation/Citation:</b>	
<b>Monitoring Frequency:</b>	
<b>RECORD KEEPING</b>	
<b>Parameter/Pollutant to be Recorded:</b>	Visible Emissions
<b>Recording Frequency:</b>	Daily
<b>Submittal Schedule of Reports:</b>	n/a
<b>REPORTING REQUIREMENTS</b>	
<b>Information in Report:</b>	n/a
<b>Reporting Frequency/ Submittal:</b>	n/a
<b>Additional Comments:</b>	n/a

**Table 5**

<b>Stack/Vent ID:</b>	S5
<b>Stack/Vent Dimensions:</b>	Ht: 14'      Dia: 1.5'      Temp: 103 °F      Flow: 3600 acfm
<b>Emission Unit:</b>	Extruder EU-07
<b>Date of Construction:</b>	1978
<b>Alternative Scenario:</b>	
<b>Pollution Control Equipment:</b>	None
<b>General Description of Requirement:</b>	PM-10 Limits to avoid Title V Program
<b>Numerical Emission Limit:</b>	2.60 lbs PM-10/hr
<b>Regulation/Citation:</b>	326 IAC 2-8
<b>Compliance Demonstration:</b>	Visible Emission Notations/Good Housekeeping
<b>PERFORMANCE TESTING</b>	
<b>Parameter/Pollutant to be Tested:</b>	n/a
<b>Testing Method/Analysis:</b>	n/a
<b>Testing Frequency/Schedule:</b>	n/a
<b>Submittal of Test Results:</b>	n/a
<b>COMPLIANCE MONITORING</b>	
<b>Monitoring Description:</b>	
<b>Monitoring Method:</b>	
<b>Monitoring Regulation/Citation:</b>	
<b>Monitoring Frequency:</b>	
<b>RECORD KEEPING</b>	
<b>Parameter/Pollutant to be Recorded:</b>	Visible Emissions
<b>Recording Frequency:</b>	Daily
<b>Submittal Schedule of Reports:</b>	n/a
<b>REPORTING REQUIREMENTS</b>	
<b>Information in Report:</b>	n/a
<b>Reporting Frequency/Submittal:</b>	n/a
<b>Additional Comments:</b>	n/a

**Table 6**

<b>Stack/Vent ID:</b>	S6		
<b>Stack/Vent Dimensions:</b>	Ht: 43'	Dia: 2'	Temp: 98 °F Flow: 4000 acfm
<b>Emission Unit:</b>	Laminating Process and Printing Operation		
<b>Date of Construction:</b>	1978		
<b>Alternative Scenario:</b>			
<b>Pollution Control Equipment:</b>	None		
<b>General Description of Requirement:</b>	PM-10 Limit on Laminating Process and Printing Operation to avoid Title V	VOC Limit for Printing Operation Only	
<b>Numerical Emission Limit:</b>	1.23 lbs PM/hr	4.8 lbs VOC/gal coating less water	
<b>Regulation/Citation:</b>	326 IAC 2-8	326 IAC 8-2-11	
<b>Compliance Demonstration:</b>	Visible Emission Notations/Good Housekeeping	MSDS Sheet	
<b>PERFORMANCE TESTING</b>			
<b>Parameter/Pollutant to be Tested:</b>	n/a		n/a
<b>Testing Method/Analysis:</b>	n/a		n/a
<b>Testing Frequency/Schedule:</b>	n/a		n/a
<b>Submittal of Test Results:</b>	n/a		n/a
<b>COMPLIANCE MONITORING</b>			
<b>Monitoring Description:</b>			n/a
<b>Monitoring Method:</b>			n/a
<b>Monitoring Regulation/Citation:</b>			n/a
<b>Monitoring Frequency:</b>			n/a
<b>RECORD KEEPING</b>			
<b>Parameter/Pollutant to be Recorded:</b>	Visible Emissions		n/a
<b>Recording Frequency:</b>	Daily		n/a
<b>Submittal Schedule of Reports:</b>	n/a		n/a
<b>REPORTING REQUIREMENTS</b>			
<b>Information in Report:</b>	n/a		MSDS of any new coating must be submitted to IDEM
<b>Reporting Frequency/Submittal:</b>	n/a		Submittal prior to use of new coating
<b>Additional Comments:</b>	n/a		n/a

**Table 7**

<b>Stack/Vent ID:</b>	S6
<b>Stack/Vent Dimensions:</b>	Ht: 43'                      Dia: 2'                      Temp: 98 °F                      Flow: 4000 acfm
<b>Emission Unit:</b>	Printing Operations
<b>Date of Construction:</b>	1978
<b>Alternative Scenario:</b>	
<b>Pollution Control Equipment:</b>	None
<b>General Description of Requirement:</b>	VOC Limit
<b>Numerical Emission Limit:</b>	4.8 lbs VOC/gal coating less water
<b>Regulation/Citation:</b>	326 IAC 8-2-11
<b>Compliance Demonstration:</b>	MSDS
<b>PERFORMANCE TESTING</b>	
<b>Parameter/Pollutant to be Tested:</b>	n/a
<b>Testing Method/Analysis:</b>	n/a
<b>Testing Frequency/Schedule:</b>	n/a
<b>Submittal of Test Results:</b>	n/a
<b>COMPLIANCE MONITORING</b>	
<b>Monitoring Description:</b>	n/a
<b>Monitoring Method:</b>	n/a
<b>Monitoring Regulation/Citation:</b>	n/a
<b>Monitoring Frequency:</b>	n/a
<b>RECORD KEEPING</b>	
<b>Parameter/Pollutant to be Recorded:</b>	n/a
<b>Recording Frequency:</b>	n/a
<b>Submittal Schedule of Reports:</b>	n/a
<b>REPORTING REQUIREMENTS</b>	
<b>Information in Report:</b>	MSDS of any new coating must be submitted to IDEM
<b>Reporting Frequency/Submittal:</b>	Submittal prior to use of new coating
<b>Additional Comments:</b>	n/a

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for New Construction and Operation

Source Name: Product Specialties, Inc.  
Source Location: 2073 McDonald Avenue, New Albany, Indiana 47150  
County: Floyd  
Construction Permit No.: F-043-6294-00039  
SIC Code: 3081  
Permit Reviewer: Michele Williams

On April 30, 1997, the Office of Air Management (OAM) had a notice published in the New Albany Tribune located in New Albany, Indiana, stating that Product Specialties, Inc., had applied for a construction permit to operate an unsupported polyvinyl chloride (PVC) film and fabric backed PVC wallcovering manufacturing plant. The notice also stated that OAM proposed to issue a permit for this installation 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 May 27, 1997, Product Specialties, Inc., submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

1. The following description clarifications to Section A.2 and Section D.1 of the FESOP in addition to the emission unit description on pages 1 and 2 of the Technical Support Document should be made:
  - (a) EU-01 exhausts to stack vent V1 and EU-03 exhausts to stack vent V3;
  - (b) EU-02 exhausts to stack vent V2 and EU-04 exhausts to stack vent V4;
  - (c) The plastisol mixing line is misrepresented as listed. The referenced throughputs are for raw materials to the plastic film mixing line described in A.2(d). Also, the plastisol mixing line calculations show this to be an insignificant activity that should be listed in Section A.3;
  - (d) The plastic film mixing line also includes a liquid scale;
  - (e) EU-06 and EU-07 do not exhaust through a baghouse; and
  - (f) The granulators are all insignificant activities and should be listed in Section A.3.
2. Several description additions have been made to Section A.3. The revised Section A.3 should state:

“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) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
  - (c) three (3) granulators that chop waste film and recirculate to the mixing line;
  - (d) one (1) plastisol mixing line with emissions exhausting to stack vent V3;
  - (e) VOC and HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
  - (f) equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment,

- (g) and welding equipment;
  - (g) closed loop heating and cooling systems;
  - (h) natural draft cooling towers not regulated under a NESHAP;
  - (i) replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
  - (j) paved and unpaved roads and parking lots with public access; and
  - (k) blowdown for sight glass, boiler, compressors, pumps, and cooling towers.”
3. Item D.1.1 and Item D.1.2 incorrectly lists the rotogravure press, EU-09, in the table as a regulated particulate matter facility. Item D.1.1 and Item D.1.2 should list the laminator, EU-08, as the regulated particulate matter facility. The OAM agrees and the changes have been made.
  4. The visible emission notations reported in D.1.6 should be performed once per daylight shift rather than once per shift. Because it is difficult to take an accurate visible emission notation at night, the OAM agrees and the change has been made. The OAM has also reworded this condition for clarity.
  5. The pressure drop readings reported in D.1.9 should be taken once per daylight shift rather than once per shift. The OAM shall require that the pressure drop be recorded once per shift to ensure continual compliance. There is minimal time involved to record the pressure drop. Unlike a visible emission notation, the daylight hours are not a constraint in taking a pressure drop reading. The pressure drop reading becomes a more important tool at night because the visible emission notations cannot be conducted. The OAM has also reworded this condition for clarity.
  6. Item D.1.9 states that the pressure drop range across the plastic film manufacturing line baghouse shall be maintained within the range of 2.0 and 5.0 inches of water. The pressure drop range across the plastic film manufacturing line baghouse is normally between 2.0 and 8.0 inches of water. After reviewing the baghouse specifications associated with the plastic film manufacturing line, the OAM has accepted this broader range in pressure drop. Item D.1.9 has been modified to reflect an acceptable pressure drop range between 2.0 and 8.0 inches of water.
  7. The company requests that Item D.1.12 state that daily records will be kept in a log book controlled by the Production Superintendent or his designate. The OAM has reviewed this condition and has determined that “the Permittee” as stated in the proposed permit encompasses the Production Superintendent or his designate. Therefore, no change to this condition is necessary. The OAM has, however, reworded this condition for clarity.
  8. The company requests that quarterly reporting be removed from Item D.1.13. Records of visible observations and static pressure of control devices will be kept onsite and available for inspection. Compliance certification is required on an annual basis. An annual emissions report will be submitted by April 15 of each year. Any deviations from permit requirements are required to be submitted within 10 days from discovery of the deviation (other than emergencies). The additional reporting burden does not seem to provide any additional environmental benefit. The OAM agrees and has removed Item D.1.13 and the reporting form from the FESOP.
  9. A Preventive Maintenance Plan for Item D.2.3 should not be required since this is an insignificant activity. The OAM agrees and has removed Item D.2.3 from the FESOP.
  10. Item 1(a) of the Technical Support Document states that daily emissions observations of each stack taken in sets of three (3) six-minute readings are overly burdensome. Six (6) stacks at 18 minutes per day resulting in almost 2 hours is unrealistic and serves no significant environmental benefit. The company requests that this be changed to one (1) observation to be conducted during each daylight shift. The OAM instead shall require visible emission notations which are

outlined in Item D.1.6 of the FESOP.

11. Since the baghouses for the storage silos are not equipped with pressure gauges, the last sentence of Item 1 on page 6 of the Technical Support Document should refer only to the baghouse for the plastic film mixing line. The OAM acknowledges this statement. These storage silos are only operated during the material loading activities. Because of the limited activity, it is not necessary to equip these baghouses with pressure gauges. The OAM has revised Item D.1.6 to include that visible emission notations be performed on the storage silo baghouses during the material loading activities to ensure compliance.
12. The established PM and PM-10 limit for the plastic film mixing line/granulators in Table 4 of the Technical Support Document does not agree with the limit shown in Item D.1.2 of the FESOP. The correct value is 3.52 pounds per hour. The OAM acknowledges this statement. The FESOP is the enforceable document and Item D.1.2 shows the correct value.

## APPENDIX A EMISSIONS CALCULATIONS

**Product Specialties, Inc.**  
2073 McDonald Avenue  
New Albany, Indiana 47150  
CP-043-6294, Plt ID-043-00039

### A) Plastic Film Manufacturing Line:

The PVC process operations are batch processes. Therefore, in order to determine the potential emissions, this source provided the maximum rate of production in a given time frame. This value was then extrapolated out to calculate the potential maximum production per year.

#### 1) Storage and Handling of Bulk Material

The source has two (2) storage silos, one containing calcium carbonate and one containing resin pellets. The silos are equipped with baghouses to control PM emissions.

Raw Material	Unit ID Number	Max Rate tons/hr	PM/PM10 Emission Factor lb PM/ton	Potential PM/PM10 Emissions tons/yr	Pollution Control % Efficiency	Potential PM/PM10 Emissions with Control tons/yr	Allowable PM/PM10 Emissions tons/yr
Resin Silo	EU-01	0.44	13.0	25.05	99.0	0.251	10.4
Resin Transfer	EU-03	0.44	13	25.05	99.0	0.251	
CaCO3 Silo	EU-02	0.29	13	16.51	99.0	0.165	7.84
CaCO3 Transfer	EU-04	0.29	13	16.51	99.0	0.165	
Totals:				83.1		0.83	18.2

#### Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material \* 2000 lb/ton material  
Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23  
Potential PM Emissions, tons/yr = max rate, tons/yr \* emission factor, lb PM/ton material \* ton/2000 lb \* 8760 hr/yr  
Allowable PM Emissions, tons/yr = 4.10 \* (Max Rate) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

#### 2) Mixing Process

##### a) Plastic Film Mixing Process

Raw Material	Unit ID Number	Max Rate tons/hr	PM/PM10 Emission Factor lb PM/ton	Potential PM/PM10 Emissions tons/yr	Pollution Control % Efficiency	Potential PM/PM10 Emissions with Control tons/yr	Allowable PM/PM10 Emissions tons/yr
Dry Scale	EU-05-01	0.739	0.6	1.94	99.0	0.019	
Scale Transfer	EU-05-02	0.794	0.6	2.09	99.0	0.021	
Mixer Transfer	EU-05-03	0.794	0.6	2.09	99.0	0.021	15.4
Cool Blend Transfer	EU-05-04	0.794	0.6	2.09	0	2.09	
Tote Transfer	EU-05-05	0.794	0.6	2.09	0	2.09	
Ribbon Blend Transfer	EU-05-06	0.794	0.6	2.09	0	2.09	
Totals:				178.6		7.98	15.4

#### Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material \* 2000 lb/ton material  
Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23  
Potential PM Emissions, tons/yr = max rate, tons/yr \* emission factor, lb PM/ton material \* ton/2000 lb \* 8760 hr/yr  
Allowable PM Emissions, tons/yr = 4.10 \* (Max Rate) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

##### b) Plastisol Mixing Process -- (this portion of the process is an insignificant activity)

The source manufactures plastisol to use in the lamination operation. A portion of the plastisol manufactured is packaged and shipped off-site.

Unit	Max Usage tons/hr	PM Emission Factor lb/ton	Potential PM Emissions tons/yr
Plastisol	0.06	0.6	0.158

#### Methodology:

Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23  
Potential Emissions (tons/yr) = Max Usage (tons/hr) x Emission Factor (lb/ton) / 2,000 lb/ton x 8760 hrs/yr  
Allowable PM/PM10 Emissions, tons/yr = 4.10 \* (Max Usage, ton/hr) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

**c) Granulator Operations -- (this portion of the process is an insignificant activity)**

There are three (3) granulators at the source that chop waste film. This material is fed back into the hopper and mixed with raw materials. The source estimates that 7% of the film produced is waste and is granulated. A majority of the final product from this process is greater than 10 microns.

The maximum usage of the laminating process is 352 yards per hour. According to the source, 7% of the film produced is waste, which calculates out to be 24.6 yards waste per hour. The potential emissions, assuming that all waste produced is PM or PM-10, yields the following:

Unit	Max Waste yards/hr	PM/PM10 Emission Factor lb PM/yard	Potential PM/PM10 Emissions tons/yr
Waste Film	24.6	0.0005	0.05

**Methodology:**

Emission Factor for the laminator was derived from actual stack test data from a similar source

Conversion: 1 yard = 15 ounces and 352 yards/hr = 330 lbs/hr

Potential Emissions (tons/yr) = Max Usage (tons/hr) x Emission Factor (lb/ton) / 2,000 lb/ton x 8760 hrs/yr

Allowable PM/PM10 Emissions, tons/yr = 4.10 \* (Max Usage, ton/hr) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

The allowable emissions are determined from the process line. The plastisol mixing process is an insignificant activity, but is part of the process line. To determine the allowable emissions from the "significant" activities, the potential emissions from the plastisol mixing process were subtracted from the total allowable emissions.

Allowable Emissions from Significant Activities (Plastic Film Mixing) = 15.4 tons/yr - 0.158 tons/yr - 0.05 tons/yr = 15.2 tons/yr

**3) Extruder Lines**

The raw materials are mixed and color blended to form a compound. This compound is then conveyed via auger to a hopper. The hopper feeds to the extruder line to produce a plastic film. The extrusion line consists of two (2) extrusion units, EU-06 and EU-07, each having a maximum capacity of 1750 lbs of compound per hour. The emission factor for this process was obtained from stack tests performed for the same process at a different source. The potential PM emissions after controls are below the calculated allowable PM emissions, and therefore in compliance with 326 IAC 6-3-2.

Unit	Unit ID Number	Max Usage lb cmpd/hr	VOC Emission Factor lb VOC/lb cmpd	Potential VOC Emissions tons/yr	PM/PM10 Emission Factor lb PM/lb cmpd	Potential PM/PM10 Emissions tons/yr	Allowable PM/PM10 Emissions tons/yr
Extruder 1	EU-06	1020	0.0043	19.2	0.00232	10.4	11.4
Extruder 2	EU-07	1020	0.0043	19.2	0.00232	10.4	11.4
Totals:				38.4		20.7	22.9

**Methodology:**

Emission Factors for the extruders were derived from actual stack test data from a similar source

Potential Emissions, tons/yr = maximum usage, lb cmpd/hr \* emission factor, lb pollutant/lb cmpd \* 8760 hrs/yr \* ton/2000 lb

Allowable PM/PM10 Emissions, tons/yr = 4.10 \* (Max Usage, ton/hr) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

**4) Laminating Process**

This is a combining function. Polyester is combined with a PVC sheet. The material that provides the bond is plastisol.

Unit	Unit ID Number	Max Usage yards/hr	VOC Emission Factor lb VOC/yard	Potential VOC Emissions tons/yr	PM/PM10 Emission Factor lb PM/yard	Potential PM/PM10 Emissions tons/yr	Allowable PM/PM10 Emissions tons/yr
Laminated Film	EU-08	352	0.0065	10.0	0.0005	0.77	5.37

**Methodology:**

Emission Factors for the laminator were derived from actual stack test data from a similar source

Potential VOC Emissions, tons/yr = max usage, yards/hr \* VOC emission factor, lb VOC/yard \* 8760 hrs/yr \* tons/2000 lbs

Potential PM/PM10 Emissions, tons/yr = max usage, yards/hr \* PM emission factor, lb PM/yard \* 8760 hrs/yr \* tons/2000 lbs

Conversion: 1 yard = 15 ounces and 352 yards/hr = 330 lbs/hr

Allowable PM/PM10 Emissions, tons/yr = 4.10 \* (Max Usage, ton/hr) ^0.67 \* 8760 hrs/yr \* ton/2000 lb

**5) Printing Operations**

In order for this source to be in compliance with 326 IAC 8-2-11, it must reduce VOC emissions from the coating applicators of the printing operations 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 operations has a VOC content of 3.35 lbs per gallon coating, and therefore, is in compliance with this rule.

Worst Case As-Applied Ink	Unit ID Number	Max Line Speed ft/min	Max Width inches	Max Throughput MM in <sup>2</sup> /yr	Max Coverage lb/MM in <sup>2</sup>	Wt % Volatile %	Wt % Water %	Pot VOC Emissions tons/yr
Ink/Colorant	EU-09	30	57	10785	15	77.8	64.4	10.8

**Methodology:**

Throughput = max line speed, ft/min \* 12 in/ft \* max print width, MMin<sup>2</sup> \* 60 min/hr \* 8760 hrs/yr = MMin<sup>2</sup> per Year

Pot VOC Emissions, tons/yr = max cover, lbs/MM in<sup>2</sup> \* wt % organics (wt % of volatiles (organics + H<sub>2</sub>O) - wt % of H<sub>2</sub>O) \* flash off, % \* throughput, MMin<sup>2</sup>/yr \* tons/2000 lbs

Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

**B) Insignificant Activities:**

**1) Natural Gas Fired Boiler**

Heat Input Capacity, MMBtu/hr = 2.7 Potential Throughput, MMCF/yr = 11.8

	PM/PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Emission Factor in lb/MMCF	12	0.6	100 (uncontrolled)	5.3	21 (uncontrolled)
Potential Emission in tons/yr	0.071	0.004	0.591	0.031	0.124

**Methodology:**

MMBtu = 1,000,000 Btu

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

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

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

**2) Degreasing Operations**

Material	Density lb/gal	Wt % VOC %	Wt % Total HAPs %	Max Usage gal/yr	Potential VOC Emissions tons/yr	Total HAPs Emissions tons/yr
Mineral Spirits	4.9	99.9	2.0	2246	5.50	0.110

**Methodology:**

Max Usage, gal/yr = actual usage (40 gal/yr) / actual hrs operation (156 hrs/yr) \* potential hrs (8760 hrs/yr)

Potential VOC Emissions, tons/yr = wt % of volatiles \* density, lb/gal \* max usage, gal/yr \* 1 ton/2000 lbs

HAPs Emissions: Toluene = 0.5%, Xylenes = 1.0%, Ethyl Benzene = 0.5%, Total HAPs = 2%

**C) Emissions Summary**

Emissions Facility	Pollutant, tons/yr					
	PM/PM10	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	HAPs
Potential Emissions	117.3	64.7	0.591	0.124	0.004	0.11
Potential Controlled Emissions	28.9	64.7	0.591	0.124	0.004	0.11
Allowable Emissions	61.9	64.7	0.591	0.124	0.004	0.11

**Actual Emissions:**

**A) Storage and Handling of Bulk Material**

Resin Silo	EU-01	871	13.0	5.66	99	0.057
Resin Transfer	EU-03	871	13.0	5.66	99	0.057
CaCO <sub>3</sub> Transfer	EU-04	581	13.0	3.78	99	0.038