



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 26, 2008

RE: Parker Hannifin Corporation, Process Filtration Division / 123-26509-00015

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

## Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot12/03/07



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**Federally Enforceable State Operating Permit Renewal  
OFFICE OF AIR QUALITY**

**Parker Hannifin Corporation, Process Filtration Division  
2002 Main St  
Tell City, Indiana 47586**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F123-26509-00015	
Issued by/Original Signed By:	Issuance Date: November 26, 2008
	Expiration Date: November 26, 2018
Iryn Calilung, Section Chief Permits Branch Office of Air Quality	

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## SECTION A

## SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary filtration products manufacturing source.

Source Address:	2002 Main St, Tell City, Indiana 47586
Mailing Address:	2002 Main St, Tell City, IN 47586
General Source Phone Number:	812-548-0315
SIC Code:	2269
County Location:	Perry
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) PCC Flo Pak process, including the curing process, identified as EU-1c, installed in 1994, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour, uncontrolled and exhausting to Stacks J-1, J-2, J-3, and J-4; [326 IAC 8-1-6]
- (b) One (1) Carbon Cartridge End Cap Adhesion process, identified as EU-2, installed in 1991, with a maximum capacity of seven hundred eighty-four ten-thousandths (0.784) pounds of adhesive per hour, uncontrolled and exhausting to Stack B;
- (c) One (1) Needled Media process, identified as EU-4, installed in 1985, with a maximum capacity of six hundred eighty-two (682) pounds of media per hour, controlled by dust collector DC-3, and exhausting to Stack H; [326 IAC 6-3-2]
- (d) One (1) Flo Pak Plastisol process, identified as EU-5, installed in 1994, with a maximum capacity of sixteen and thirty-five hundredths (16.35) pounds of plastisol per hour, uncontrolled, and exhausting to Stack S-6; and
- (e) One (1) Pro-Bond process, consisting of the following equipment:
  - (1) One (1) Resin Impregnator, identified as R-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour and one and three tenths (1.3) pounds of resin per log, uncontrolled and exhausting to the plant interior;  
  
Under NSPS Subpart VVV, this is considered an affected coating operation.
  - (2) One (1) Cut and Pack process, identified as CP-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour, controlled by dust collector DC-1, and exhausting to the plant interior. [326 IAC 6-3-2]

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

This stationary source also includes the following insignificant activities:

- (a) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone, and including; [326 IAC 6-3-2]
  - (1) One (1) Paper Trimming Operation, identified as EU-1a, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour (lbs/hr), controlled by a cyclone (C-1), exhausting to a fabric filter (DC-2), and then to the plant interior;
  - (2) Three (3) Roving Reclamation Units, including one (1) cutter, one (1) chopper and one (1) opener, identified as RR-1, RR-2, and RR-3, consecutively, with a maximum capacity of three hundred seventy-five (375) lbs per hour, each, controlled by dust collectors DC-4 through DC-6, and exhausting to the plant interior;
- (b) One (1) Fiberglass Baking process, identified as EU-3, installed in 1974, with a maximum capacity of ninety-two and fifty-seven hundredths (92.57) pounds of fiberglass per hour, uncontrolled and exhausting to Stack D;
- (c) One (1) Production Welding Station, identified as W-1, and other non-production related welding and flame cutting activities, using less than six hundred and twenty-five (625) pounds of wire or rod per day, combined, uncontrolled and exhausting to the plant interior, and including the following;
  - (1) Three (3) Metal Inert Gas (MIG)(carbon steel) welding stations;
  - (2) One (1) Stick (E7018 electrode) welding station;
  - (3) One (1) Tungsten Inert Gas (TIG)(carbon steel) welding station;
  - (4) One (1) Oxyacetylene (carbon steel) welding station;
  - (5) One (1) Oxyacetylene flame cutting station;
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:
  - (1) One (1) natural gas-fired cure oven, identified as PC-1, installed in 2001, with a maximum heat input capacity of one and six tenths (1.6) million British thermal units per hour, and exhausting to Stack S-1;
  - (2) One (1) natural gas-fired cure oven, identified as FC-1, installed in 2001, with a maximum heat input capacity of two and seventy-five hundredths (2.75) million British thermal units per hour, uncontrolled and exhausting to Stack S-2;
  - (3) One (1) natural gas-fired cure oven, identified as SC-1, installed in 2001, with a maximum heat input capacity of thirty-five hundredths (0.35) million British thermal units per hour, uncontrolled and exhausting to Stack S-3;
  - (4) One (1) natural gas-fired oven, identified as CO, with a maximum heat input capacity of thirty-five hundredths (0.35) million British thermal units per hour, uncontrolled and exhausting to the plant interior;

- (5) One (1) natural gas-fired oven, identified as EU-1b, installed in 1994, with a maximum heat input capacity of two and eight tenths (2.8) million British thermal units per hour; uncontrolled, and exhausting to Stacks J-1, J-2, J-3, and J-4;
- (6) Miscellaneous natural gas-fired heaters and air make-up units, collectively identified as H-1, with a combined maximum heat input capacity of two and seven hundred sixty-four thousandths (2.764) million British thermal units per hour, uncontrolled, and exhausting to the plant interior;
- (e) The following VOC and HAP storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids;
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings;
- (g) Closed loop heating and cooling systems;
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (i) Paved and unpaved roads and parking lots with public access;
- (j) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (l) Other emergency equipment as follows: Stationary fire pumps; and
- (m) Other activities or categories not previously identified: Bubble point test; using isopropyl alcohol.

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

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

## **SECTION B GENERAL CONDITIONS**

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

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

### **B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

- (a) This permit, F123-26509-00015, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

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

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

### **B.5 Severability [326 IAC 2-8-4(4)]**

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

### **B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

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

### **B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]**

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

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

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, SWRO within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6865  
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
  - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
  - (g) Operations may continue during an emergency only if the following conditions are met:
    - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
    - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

- (a) All terms and conditions of permits established prior to F123-26509-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**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]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) 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). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

#### C.2 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

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

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.

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

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

#### C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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

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

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

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Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on. The plan is included as Attachment A.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

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

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

#### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

#### **C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

#### **C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

**C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

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

**C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]**

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

#### C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## **Stratospheric Ozone Protection**

### **C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

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

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

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Filtration Products Manufacturing

- (a) One (1) PCC Flo Pak process, including the curing process, identified as EU-1c, installed in 1994, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour, uncontrolled and exhausting to Stacks J-1, J-2, J-3, and J-4; [326 IAC 8-1-6]
- (b) One (1) Carbon Cartridge End Cap Adhesion process, identified as EU-2, installed in 1991, with a maximum capacity of seven hundred eighty-four ten-thousandths (0.784) pounds of adhesive per hour, uncontrolled and exhausting to Stack B;
- (c) One (1) Needled Media process, identified as EU-4, installed in 1985, with a maximum capacity of six hundred eighty-two (682) pounds of media per hour, controlled by dust collector DC-3, and exhausting to Stack H; [326 IAC 6-3-2]
- (d) One (1) Flo Pak Plastisol process, identified as EU-5, installed in 1994, with a maximum capacity of sixteen and thirty-five hundredths (16.35) pounds of plastisol per hour, uncontrolled, and exhausting to Stack S-6; and
- (e) One (1) Pro-Bond process, consisting of the following equipment:
  - (1) One (1) Resin Impregnator, identified as R-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour and one and three tenths (1.3) pounds of resin per log, uncontrolled and exhausting to the plant interior;  
  
Under NSPS Subpart VVV, this is considered an affected coating operation.
  - (2) One (1) Cut and Pack process, identified as CP-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour, controlled by dust collector DC-1, and exhausting to the plant interior. [326 IAC 6-3-2]

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

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

#### D.1.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-1-6]

The PCC Flo Pak process, installed in 1994, including the curing process, identified as EU-1c, shall use less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents. Compliance with this limit shall render the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.

#### D.1.2 Hazardous Air Pollutants (HAPs) Limitations [326 IAC 2-8-4] [326 IAC 2-4.1] [326 IAC 20]

In order to render the requirements of 326 IAC 2-4.1, and 326 IAC 20 not applicable, the Permittee shall comply with the following:

- (a) The input of any single HAP to the PCC Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion Process (EU-2), the Flo Pak Plastisol Process (EU-5), or the Pro Bond Process (R-1), shall be less than nine and nine tenths (9.9) tons per twelve (12) consecutive month period with compliance determined at the end of each month; and
- (b) The input of any combination of HAPs to the Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion Process (EU-2), the Flo Pak Plastisol Process (EU-5), and

the Pro Bond Process (R-1), combined, shall be less than twenty-four and eight tenths (24.8) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

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

#### D.1.3 Particulate [326 IAC 6-3-2]

---

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Needled Media process, identified as EU-4, shall not exceed one and ninety-nine hundredths (1.99) pounds per hour when operating at a process weight rate of six hundred eighty-two (682) pounds per hour.

Interpolation of the data for the process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Cut and Pack process, identified as CP-1, shall not exceed one and six hundredths (1.06) pounds per hour when operating at a process weight rate of two hundred sixty-six (266) pounds per hour.

Interpolation of the data for the process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

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

#### D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the Needled Media process (EU-4) and the Cut and Pack process (CP-1), and any associated control devices.

### Compliance Determination Requirements

#### D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2] [326 IAC 8-1-4]

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Compliance with the VOC and HAP usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.1.6 Particulate Control

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- (a) In order to comply with Condition D.1.3, the dust collectors (DC-3 and DC-1) for particulate control shall be in operation and control emissions from the Needled Media process (EU-4) and the Cut and Pack process (CP-1) at all times that EU-4 and CP-1 are in operation.
- (b) In the event that dust collector failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### D.1.7 Visible Emissions Notations

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- (a) Daily visible emission notations of the Needled Media process (EU-4) stack exhaust (Stack H) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) 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.
- (c) 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.
- (d) 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.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.1.8 Parametric Monitoring

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- (a) The Permittee shall record the pressure drop across the dust collector (DC-3) used in conjunction with the Needled Media process (EU-4), at least once per day when the Needled Media process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of five tenths (0.5) and three (3.0) inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the dust collector (DC-1) used in conjunction with the Cut and Pack process (CP-1), at least once per day when the Cut and Pack process is in operation and when exhausting to the outside atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of one (1.0) and four and five tenths (4.5) inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. A pressure reading that is

outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### D.1.9 Broken or Failed Bag Detection

---

- (a) For a single compartment dust collectors controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### D.1.10 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with each of the VOC and HAP content and usage limits established in Conditions D.1.1 and D.1.2.
  - (1) The VOC and HAP content of each coating material and solvent used.
  - (2) The amount of coating material and solvent less water used on monthly basis.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
  - (3) The total VOC, and total single and combined HAP usage for each month.
  - (4) The weight of VOCs, and single and combined HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain daily records of the visible emission notations of the Needled Media process (EU-4) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

- (c) To document compliance with Condition D.1.8(a), the Permittee shall maintain daily records of the pressure drop across dust collector DC-3, controlling the Needled Media process (EU-4). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (d) To document compliance with Condition D.1.8(b), the Permittee shall maintain daily records of the pressure drop across dust collector DC-1, controlling the Cut and Pack process (CP-1), when exhausting to the outside atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2(a), and D.1.2(b) shall be submitted to the addresses listed in Section C - General Reporting requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Insignificant Activities

- (a) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone, and including; [326 IAC 6-3-2]
- (1) One (1) Paper Trimming Operation, identified as EU-1a, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour (lbs/hr), controlled by a cyclone (C-1), exhausting to a fabric filter (DC-2), and then to the plant interior;
  - (2) Three (3) Roving Reclamation Units, including one (1) cutter, one (1) chopper and one (1) opener, identified as RR-1, RR-2, and RR-3, consecutively, with a maximum capacity of three hundred seventy-five (375) lbs per hour, each, controlled by dust collectors DC-4 through DC-6, and exhausting to the plant interior;

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

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

#### D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Paper Trimming Operation, identified as EU-1a, shall not exceed seventy-eight hundredths (0.78) pounds per hour when operating at a process weight rate of one hundred sixty-seven (167) pounds per hour.

Interpolation of the data for the process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from one (1) Roving Cutter, identified as RR-1, the one (1) Roving Chopper, identified as RR-2, and the one (1) Roving opener, identified as RR-3, shall each not exceed one and thirty-four hundredths (1.34) pounds per hour when operating at a process weight rate of three hundred seventy-five (375) pounds per hour.

Interpolation of the data for the process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

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

## SECTION E.1

## FACILITY OPERATION CONDITIONS

### Emissions Unit Description: Surface Coating

- (e) One (1) Pro-Bond process, consisting of the following equipment:
- (1) One (1) Resin Impregnator, identified as R-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour and one and three tenths (1.3) pounds of resin per log, uncontrolled and exhausting to the plant interior;  
  
Under NSPS Subpart VVV, this is considered an affected coating operation.
  - (2) One (1) Cut and Pack process, identified as CP-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour, controlled by dust collector DC-1, and exhausting to the plant interior.

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

### New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)] [326 IAC 12]

#### E.1.1 NSPS Subpart VVV Requirements - Standards of Performance for Polymeric Coating of Supporting Substrates Facilities [40 CFR Part 60, Subpart VVV] [326 IAC 12]

Pursuant to 40 CFR 60.740(a), the affected facility to which the provisions of this subpart apply includes each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates, as defined in § 60.741, for which construction, modification, or reconstruction begins after April 30, 1987, except for those facilities specifically exempted in §60.740(d).

Pursuant to §60.40(b), when using less than ninety-five (95) megagrams (Mg) (one hundred four and seven tenths (104.7) tons) of Volatile Organic Compounds (VOC) per twelve (12)-month period, the one (1) resin impregnator (R-1) is only subject to the following portions of 40 CFR 60, Subpart VVV (included as Attachment A of this permit):

- (1) 40 CFR 60.744(b);
- (2) 40 CFR 60.747(b);
- (3) 40 CFR 60.747(c);
- (4) 40 CFR 60.747(g); and
- (5) 40 CFR 60.747(h).

Nonapplicable portions of the NSPS are not included in the permit.

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the resin impregnator (R-1), except when otherwise specified in 40 CFR 60 Subpart VVV.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

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

Source Name: Parker Hannifin Corporation, Process Filtration Division  
Source Address: 2002 Main St, Tell City, Indiana 47586  
Mailing Address: 2002 Main St, Tell City, IN 47586  
FESOP Permit No.: F123-26509-00015

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- Affidavit (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

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

Source Name: Parker Hannifin Corporation, Process Filtration Division  
Source Address: 2002 Main St, Tell City, Indiana 47586  
Mailing Address: 2002 Main St, Tell City, IN 47586  
FESOP Permit No.: F123-26509-00015

**This form consists of 2 pages**

**Page 1 of 2**

- |  |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16</li></ul> |
|--|

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

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

### FESOP Quarterly Report

Source Name: Parker Hannifin Corporation, Process Filtration Division  
 Source Address: 2002 Main St, Tell City, Indiana 47586  
 Mailing Address: 2002 Main St, Tell City, IN 47586  
 FESOP Permit No.: F123-26509-00015  
 Facility: PCC Flo Pac process (EU-1c)  
 Parameter: VOC delivered to the applicators  
 Limit: Less than twenty-five (25) tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month, including; coatings, dilution solvents, and cleaning solvents.

YEAR: \_\_\_\_\_

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

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

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

### FESOP Quarterly Report

Source Name: Parker Hannifin Corporation, Process Filtration Division  
Source Address: 2002 Main St, Tell City, Indiana 47586  
Mailing Address: 2002 Main St, Tell City, IN 47586  
FESOP Permit No.: F123-26509-00015  
Facility: EU-1c, EU-2, EU-5, and R-1  
Parameter: "Worst case" single HAP delivered to the applicators  
Limit: Less than nine and nine tenths (9.9) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: \_\_\_\_\_

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

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

### FESOP Quarterly Report

Source Name: Parker Hannifin Corporation, Process Filtration Division  
 Source Address: 2002 Main St, Tell City, Indiana 47586  
 Mailing Address: 2002 Main St, Tell City, IN 47586  
 FESOP Permit No.: F123-26509-00015  
 Facility: EU-1c, EU-2, EU-5, and R-1,  
 Parameter: Total HAPs delivered to the applicators  
 Limit: Less than twenty-four and eight tenths (24.8) tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: \_\_\_\_\_

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

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

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

Source Name: Parker Hannifin Corporation, Process Filtration Division  
 Source Address: 2002 Main St, Tell City, Indiana 47586  
 Mailing Address: 2002 Main St, Tell City, IN 47586  
 FESOP Permit No.: F123-26509-00015

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## ATTACHMENT A

### 40 CFR 60, SUBPART VVV - STANDARDS OF PERFORMANCE FOR POLYMERIC COATING OF SUPPORTING SUBSTRATES FACILITIES

Source: 54 FR 37551, Sept. 11, 1989, unless otherwise noted.

#### § 60.740 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates.
- (b) Any affected facility for which the amount of VOC used is less than 95 Mg per 12-month period is subject only to the requirements of §§60.744(b), 60.747(b), and 60.747(c). If the amount of VOC used is 95 Mg or greater per 12-month period, the facility is subject to all the requirements of this subpart. Once a facility has become subject to the requirements of this subpart, it will remain subject to those requirements regardless of changes in annual VOC use.
- (c) This subpart applies to any affected facility for which construction, modification, or reconstruction begins after April 30, 1987, except for the facilities specified in paragraph (d) of this section.
- (d) This subpart does not apply to the following:
  - (1) Coating mix preparation equipment used to manufacture coatings at one plant for shipment to another plant for use in an affected facility (coating operation) or for sale to another company for use in an affected facility (coating operation);
  - (2) Coating mix preparation equipment or coating operations during those times they are used to prepare or apply waterborne coatings so long as the VOC content of the coating does not exceed 9 percent by weight of the volatile fraction;
  - (3) Web coating operations that print an image on the surface of the substrate or any coating applied on the same printing line that applies the image.

#### § 60.741 Definitions, symbols, and cross-reference tables.

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

*Coating applicator* means any apparatus used to apply a coating to a continuous substrate.

*Coating mix preparation equipment* means all mixing vessels in which solvent and other materials are blended to prepare polymeric coatings.

*Coating operation* means any coating applicator(s), flashoff area(s), and drying oven(s) located between a substrate unwind station and a rewind station that coats a continuous web to produce a substrate with a polymeric coating. Should the coating process not employ a rewind station, the end of the coating operation is after the last drying oven in the process.

*Common emission control device* means a device controlling emissions from an affected coating operation as well as from any other emission source.

*Concurrent* means the period of time in which construction of an emission control device serving an affected facility is commenced or completed, beginning 6 months prior to the date that construction of the affected facility commences and ending 2 years after the date that construction of the affected facility is completed.

*Control device* means any apparatus that reduces the quantity of a pollutant emitted to the air.

*Cover* means, with respect to coating mix preparation equipment, a device that fits over the equipment opening to prevent emissions of volatile organic compounds (VOC) from escaping.

*Drying oven* means a chamber within which heat is used to dry a surface coating; drying may be the only process or one of multiple processes performed in the chamber.

*Equivalent diameter* means four times the area of an opening divided by its perimeter.

*Flashoff area* means the portion of a coating operation between the coating applicator and the drying oven where VOC begins to evaporate from the coated substrate.

*Natural draft opening* means any opening in a room, building, or total enclosure that remains open during operation of the facility and that is not connected to a duct in which a fan is installed. The rate and direction of the natural draft across such an opening is a consequence of the difference in pressures on either side of the wall or barrier containing the opening.

*Nominal 1-month period* means a calendar month or, if established prior to the performance test in a statement submitted with notification of anticipated startup pursuant to 40 CFR 60.7(a)(2), a similar monthly time period (e.g., 30-day month or accounting month).

*Onsite coating mix preparation equipment* means those pieces of coating mix preparation equipment located at the same plant as the coating operation they serve.

*Polymeric coating of supporting substrates* means a web coating process that applies elastomers, polymers, or prepolymers to a supporting web other than paper, plastic film, metallic foil, or metal coil.

*Substrate* means the surface to which a coating is applied.

*Temporary enclosure* means a total enclosure that is constructed for the sole purpose of measuring the fugitive VOC emissions from an affected facility.

*Total enclosure* means a structure that is constructed around a source of emissions and operated so that all VOC emissions are collected and exhausted through a stack or duct. With a total enclosure, there will be no fugitive emissions, only stack emissions. The drying oven itself may be part of the total enclosure.

*Vapor capture system* means any device or combination of devices designed to contain, collect, and route solvent vapors released from the coating mix preparation equipment or coating operation.

*VOC in the applied coating* means the product of Method 24 VOC analyses or formulation data (if those data are demonstrated to be equivalent to Method 24 results) and the total volume of coating fed to the coating applicator.

*VOC used* means the amount of VOC delivered to the coating mix preparation equipment of the affected facility (including any contained in premixed coatings or other coating ingredients prepared off the plant site) for the formulation of polymeric coatings to be applied to supporting

substrates at the coating operation, plus any solvent added after initial formulation is complete (e.g., dilution solvent added at the coating operation). If premixed coatings that require no mixing at the plant site are used, "VOC used" means the amount of VOC delivered to the coating applicator(s) of the affected facility.

*Volatile organic compounds* or *VOC* means any organic compounds that participate in atmospheric photochemical reactions; or that are measured by a reference method, an equivalent method, an alternative method, or that are determined by procedures specified under any subpart.

*Waterborne coating* means a coating which contains more than 5 weight percent water in its volatile fraction.

*Web coating* means the coating of products, such as fabric, paper, plastic film, metallic foil, metal coil, cord, and yarn, that are flexible enough to be unrolled from a large roll; and coated as a continuous substrate by methods including, but not limited to, knife coating, roll coating, dip coating, impregnation, rotogravure, and extrusion.

(b) The nomenclature used in this subpart has the following meaning:

Ak = the area of each natural draft opening (k) in a total enclosure, in square meters.

Caj = the concentration of VOC in each gas stream (j) exiting the emission control device, in parts per million by volume.

Cbi = the concentration of VOC in each gas stream (i) entering the emission control device, in parts per million by volume.

Cdi = the concentration of VOC in each gas stream (i) entering the emission control device from the affected coating operation, in parts per million by volume.

Cfk = the concentration of VOC in each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected coating operation, in parts per million by volume.

Cgv = the concentration of VOC in the gas stream entering each individual carbon adsorber vessel (v), in parts per million by volume. For purposes of calculating the efficiency of the individual adsorber vessel, Cgv may be measured in the carbon adsorption system's common inlet duct prior to the branching of individual inlet ducts.

Chv = the concentration of VOC in the gas stream exiting each individual carbon adsorber vessel (v), in parts per million by volume.

E = the control device efficiency achieved for the duration of the emission test (expressed as a fraction).

F = the VOC emission capture efficiency of the vapor capture system achieved for the duration of the emission test (expressed as a fraction).

FV = the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

Hv = the individual carbon adsorber vessel (v) efficiency achieved for the duration of the emission test (expressed as a fraction).

- Hsys = the carbon adsorption system efficiency calculated when each adsorber vessel has an individual exhaust stack.
- Mci = the total mass (kg) of each coating (i) applied to the substrate at an affected coating operation during a nominal 1-month period as determined from facility records.
- Mr = the total mass (kg) of VOC recovered for a nominal 1-month period.
- Qaj = the volumetric flow rate of each gas stream (j) exiting the emission control device, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.
- Qbi = the volumetric flow rate of each gas stream (i) entering the emission control device, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.
- Qdi = the volumetric flow rate of each gas stream (i) entering the emission control device from the affected coating operation, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.
- Qfk = the volumetric flow rate of each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected coating operation, in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.
- Qgv = the volumetric flow rate of the gas stream entering each individual carbon adsorber vessel (v), in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration. For purposes of calculating the efficiency of the individual adsorber vessel, the value of Qgv can be assumed to equal the value of Qhv measured for that adsorber vessel.
- Qhv = the volumetric flow rate of the gas stream exiting each individual carbon adsorber vessel (v), in dry standard cubic meters per hour when Method 18 or 25 is used to measure VOC concentration or in standard cubic meters per hour (wet basis) when Method 25A is used to measure VOC concentration.
- Qini = the volumetric flow rate of each gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).
- Qoutj = the volumetric flow rate of each gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).
- R = the overall VOC emission reduction achieved for the duration of the emission test (expressed as a fraction).
- RSi = the total mass (kg) of VOC retained on the coated substrate after oven drying or contained in waste coating for a given combination of coating and substrate.
- Woi = the weight fraction of VOC in each coating (i) applied at an affected coating operation during a nominal 1-month period as determined by Method 24.

(c) Tables 1a and 1b present a cross reference of the affected facility status and the relevant section(s) of the regulation.

**Table 1a—Cross Reference**<sup>a,b</sup>

Status	Standard	Compliance Provisions §60.743
A. Coating operation:		
1. If projected VOC use is <95 Mg/yr	§60.740(b): Monitor VOC use	Not applicable.
2. If projected VOC use is ≥95 Mg/yr	§60.742(b)(1): Reduce VOC emissions to the atmosphere from the coating operation by at least 90 percent; or	(a)(1), (a)(2), (a)(3), or (a)(4);
	§60.742(b)(2): Install, operate, and maintain a total enclosure around the coating operation and vent the captured VOC emissions from the total enclosure to a control device that is at least 95 percent efficient	(b), (e).
B. Coating mix preparation equipment:		
1. If projected VOC use is ≥95 Mg/yr but <130 Mg/yr	§60.742(c)(3): (i) Install, operate, and maintain a cover on each piece of affected equipment; or (ii) install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions to a VOC control device	(d), (e).
2. If projected VOC use is ≥130 Mg/yr but there is no concurrent construction of a control device	§60.742(c)(2): (i) Install, operate, and maintain a cover on each piece of affected equipment; or (ii) install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions to a VOC control device	(d).
3. If projected VOC use is ≥130 Mg/yr and there is concurrent construction of a control device	§60.742(c)(1): Install, operate, and maintain a cover on each piece of affected equipment and vent VOC emissions from the covered equipment to a 95 percent efficient control device while preparation of the coating is taking place within the vessel	(c), (e).

<sup>a</sup> This table is presented for the convenience of the user and is not intended to supersede the language of the regulation. For the details of the requirements, refer to the text of the regulation.

<sup>b</sup> Refer to Table 1b to determine which subsections of §§60.744, 60.745, and 60.747 correspond to each compliance provision (§60.743).

**Table 1b—Cross Reference**

Compliance provisions §60.743	Test methods §60.745	Category/equipment <sup>a</sup>	Monitoring requirements §60.744	Reporting and recordkeeping requirements §60.747
A. Coating operation:				
(a)(1) — Gaseous emission test for coating operations not using carbon adsorption beds with individual exhausts	(b)–(g)	General, CA, CO, TI, CI, PE, TE	(a), (i), (j), (k), (c)(1), (d), (e), (f), (g)	(a), (d)(7), (f), (g), (h), (d)(1)(i), (d)(2)(i), (d)(3), (d)(4), (d)(5), (d)(6).
(a)(2) — Gaseous emission test for coating operations using carbon adsorption beds with individual exhausts	(b)–(g)	General, CA, PE, TE	(a), (i), (j), (k), (c)(2), (g)	(a), (d)(7), (f), (g), (h), (d)(1) (ii), (d)(2)(ii), (d)(6).

Compliance provisions §60.743	Test methods §60.745	Category/ equipment <sup>a</sup>	Monitoring requirements §60.744	Reporting and recordkeeping requirements §60.747
A. Coating operation:				
(a)(3) — Monthly liquid material balance — can be used only when a VOC recovery device controls only those emissions from one affected coating operation	(a)	VOC recovery	(i), (k)	(e), (f), (g), (h).
(a)(4) — Short-term (3 to 7 day) liquid material balance — may be used as an alternative to (a)(3)	(a)	General, CA, CO, PE, TE	(a), (i), (j), (k), (c)(1), (c)(2), (d), (g)	(a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(3), (d)(6).
(b) — Alternative standard for coating operation — demonstrate use of approved total enclosure and emissions vented to a 95 percent efficient control device	(b)–(g)	General, CA, CO, TI, CI, PE, TE	(a), (i), (j), (k), (c)(1), (c)(2), (d), (e), (f), (h)	(a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(3), (d)(4), (d)(5), (d)(6).
B. Coating mix preparation equipment:				
(c)— Standard for equipment servicing a coating operation with concurrent construction of a control device that uses at least 130 Mg/yr of VOC— demonstrate that covers meeting specifications are installed and used properly; procedures detailing proper use are posted; the mix equipment is vented to a 95 percent efficient control device	(b)–(g)	General, CA, TI, CI	(a), (i), (j), (k), (c)(1), (c)(2), (e), (f)	(a), (d)(7), (f), (g), (h), (d)(1), (d)(2), (d)(4), (d)(5).
(d)— Standard for equipment servicing a coating operation that does not have concurrent construction of a control device but uses at least 130 Mg/yr of VOC or for equipment servicing a coating operation that uses <130 Mg/yr but ≥95 Mg/yr of VOC— demonstrate that covers meeting specifications are installed and used properly; procedures detailing proper use are posted; the mix equipment is vented to a control device (optional)	No other requirements apply			

<sup>a</sup> CA = carbon adsorber; CO = condenser; TI = thermal incinerator; CI = catalytic incinerator; PE = partial enclosure; TE = total enclosure.

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**§ 60.742 Standards for volatile organic compounds.**

- (a) Each owner or operator of an affected facility that is subject to the requirements of this subpart shall comply with the emissions limitations set forth in this section on and after the date on which the initial performance test required by §60.8 is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated or 180 days after initial startup, whichever date comes first.
- (b) For the coating operation, each owner or operator of an affected facility shall either:
  - (1) Reduce VOC emissions to the atmosphere from the coating operation by at least 90 percent ("emission reduction" standard); or
  - (2) Install, operate, and maintain a total enclosure around the coating operation and vent the captured VOC emissions from the total enclosure to a control device that is at least 95 percent efficient (alternative standard).
- (c) For the onsite coating mix preparation equipment of an affected facility, the owner or operator shall comply with the following requirements, as applicable:
  - (1) For an affected facility that has concurrent construction of a control device and uses at least 130 Mg of VOC per 12-month period, the owner or operator shall install, operate, and maintain a cover on each piece of affected coating mix preparation equipment and vent VOC emissions from the covered mix equipment to a 95 percent efficient control device while preparation of the coating is taking place within the vessel.
  - (2) For an affected facility that does not have concurrent construction of a control device but uses at least 130 Mg of VOC per 12-month period, the owner or operator shall either:
    - (i) Install, operate, and maintain a cover on each piece of affected coating mix preparation equipment; or
    - (ii) Install, operate, and maintain a cover on each piece of affected coating mix preparation equipment and vent VOC emissions to a VOC control device.
  - (3) For an affected facility that uses at least 95 Mg but less than 130 Mg of VOC per 12-month period, the owner or operator shall either:
    - (i) Install, operate, and maintain a cover on each piece of affected coating mix preparation equipment; or
    - (ii) Install, operate, and maintain a cover on each piece of affected coating mix preparation equipment and vent VOC emissions to a VOC control device.

**§ 60.743 Compliance provisions.**

- (a) To demonstrate compliance with the emission reduction standard for coating operations specified in §60.742(b)(1), the owner or operator of the affected facility shall use one of the following methods.
  - (1) Gaseous emission test for coating operations not using carbon adsorption beds with individual exhausts. This method is applicable when the emissions from any affected coating operation are controlled by a control device other than a fixed-bed carbon adsorption system with individual exhaust stacks for each adsorber vessel. The owner or operator using this method shall comply with the following procedures:

- (i) Construct the vapor capture system and control device so that all gaseous volumetric flow rates and total VOC emissions can be accurately determined by the applicable test methods and procedures specified in §60.745(b) through (g);
- (ii) Determine capture efficiency from the coating operation by capturing, venting, and measuring all VOC emissions from the coating operation. During a performance test, the owner or operator of an affected coating operation located in an area with other sources of VOC shall isolate the coating operation emissions from all other sources of VOC by one of the following methods:
  - (A) Build a temporary enclosure, as defined in §60.741(a) and conforming to the requirements of §60.743(b)(1), around the affected coating operation. The temporary enclosure must be constructed and ventilated (through stacks suitable for testing) so that it has minimal impact on performance of the capture system; or
  - (B) Shut down all other sources of VOC and continue to exhaust fugitive emissions from the affected coating operation through any building ventilation system and other room exhausts such as those on drying ovens. All such ventilation air must be vented through stacks suitable for testing because the VOC content in each must be determined.
- (iii) Operate the emission control device with all emission sources connected and operating.
- (iv) Determine the efficiency (E) of the control device by Equation 1:

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

- (v) Determine the efficiency (F) of the vapor capture system by Equation 2:

$$F = \frac{\sum_{i=1}^n Q_{di}C_{di}}{\sum_{i=1}^n Q_{di}C_{di} + \sum_{k=1}^p Q_{fk}C_{fk}} \quad \text{(Equation 2)}$$

- (vi) For each affected coating operation subject to §60.742(b)(1) (emission reduction standard for coating operations), compliance is demonstrated if the product of (E)x(F) is equal to or greater than 0.90.
- (2) Gaseous emission test for coating operations using carbon adsorption beds with individual exhausts. This method is applicable when emissions from any affected coating operation are controlled by a fixedbed carbon adsorption system with individual exhaust stacks for each adsorber vessel. The owner or operator using this method shall comply with the following procedures:
- (i) Construct the vapor capture system and control device so that each volumetric flow rate and the total VOC emissions can be accurately determined by the applicable test methods and procedures specified in §60.745 (b) through (g);
  - (ii) Assure that all VOC emissions from the coating operation are segregated from other VOC sources and that the emissions can be captured for measurement, as described in §60.743(a)(1)(ii)(A)and (B);

- (iii) Operate the emission control device with all emission sources connected and operating;
- (iv) Determine the efficiency ( $H_v$ ) of each individual adsorber vessel ( $v$ ) using Equation 3:

$$H_v = \frac{Q_{gv}C_{gv} - Q_{hv}C_{hv}}{Q_{gv}C_{gv}} \quad (\text{Equation 3})$$

- (v) Determine the efficiency of the carbon adsorption system ( $H_{sys}$ ) by computing the average efficiency of the adsorber vessels as weighted by the volumetric flow rate ( $Q_{hv}$ ) of each individual adsorber vessel ( $v$ ) using Equation 4:

$$H_{sys} = \frac{\sum_{v=1}^g H_v Q_{hv}}{\sum_{v=1}^g Q_{hv}} \quad (\text{Equation 4})$$

- (vi) Determine the efficiency ( $F$ ) of the vapor capture system using Equation (2).
  - (vii) For each affected coating operation subject to §60.742(b)(1) (emission reduction standard for coating operations), compliance is demonstrated if the product of ( $H_{sys}$ )x( $F$ ) is equal to or greater than 0.90.
- (3) Monthly liquid material balance. This method can be used only when a VOC recovery device controls only those emissions from one affected coating operation. It may not be used if the VOC recovery device controls emissions from any other VOC emission sources. When demonstrating compliance by this method, §60.8(f) (Performance Tests) of this part does not apply. The owner or operator using this method shall comply with the following procedures to determine the VOC emission reduction for each nominal 1-month period:
- (i) Measure the amount of coating applied at the coating applicator. This quantity shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or appropriate adjustments shall be made to account for any ingredients added after the amount of coating has been determined;
  - (ii) Determine the VOC content of all coatings applied using the test method specified in §60.745(a). This value shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or appropriate adjustments shall be made to account for any ingredients added after the VOC content in the coating has been determined;
  - (iii) Install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that indicates the cumulative amount of VOC recovered by the control device over each nominal 1-month period. The device shall be certified by the manufacturer to be accurate to within  $\pm 2.0$  percent;
  - (iv) Measure the amount of VOC recovered; and

- (v) Calculate the overall VOC emission reduction (R) for each and every nominal 1-month period using Equation 5. Emissions during startups and shutdowns are to be included when determining R because startups and shutdowns are part of normal operation for this source category. Electronic Code of Federal Regulations: Page 10 of 17, 8/21/2008 ...  
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=d0695fb3b45e90cf39c1222483b4e5fb&r>

$$R = \frac{M_r}{\sum_{i=1}^n [W_{oi} M_{ci} - RS_i]} \quad (\text{Equation 5})$$

If the value of R is equal to or greater than 0.90, compliance with §60.742(b)(1) is demonstrated.

- (A) The value of  $RS_i$  is zero unless the owner or operator submits the following information to the Administrator for approval of a measured value of  $RS_i$  that is greater than zero but less than or equal to 6 percent by weight of the liquid VOC applied:
- (1) Measurement techniques; and
  - (2) Documentation that the measured value of  $RS_i$  exceeds zero but is less than or equal to 6 percent by weight of the liquid VOC applied.
- (B) For those facilities not subject to paragraph (a)(3)(v)(A) of this section, the value of  $RS_i$  is zero unless the owner or operator submits the following information to the Administrator for approval of a measured value of  $RS_i$  that is greater than 6 percent by weight of the liquid VOC applied.
- (1) Measurement techniques;
  - (2) Documentation that the measured value of  $RS_i$  exceeds 6 percent by weight of the liquid VOC applied; and
  - (3) Either documentation of customer specifications requiring higher values or documentation that the desired properties of the product make it necessary for  $RS_i$  to exceed 6 percent by weight of the liquid VOC applied and that such properties cannot be achieved by other means.
- (C) The measurement techniques of paragraphs (a)(3)(v)(A)( 1 ) and (a)(3)(v)(B)( 1 ) of this section shall be submitted to the Administrator for approval with the notification of anticipated startup required under §60.7(a)(2).
- (vi) The point at which  $M_r$  is to be measured shall be established when the compliance procedures are approved. The presumptive point of measurement shall be prior to separation/ purification; a point after separation/purification may be adopted for enhanced convenience or accuracy.
- (4) Short-term liquid material balance. This method may be used as an alternative to the monthly liquid material balance described in paragraph (a)(3) of this section. The owner or operator using this method shall comply with the following procedures to determine

VOC emission reduction for a 3- to 7-day period and shall continuously monitor VOC emissions as specified in §60.744.

- (i) Use the procedures described in paragraphs (a)(3)(i) through (vi) of this section to determine the overall emission reduction, R. Compliance is demonstrated if the value of R is equal to or greater than 0.90.
  - (ii) The number of days for the performance test (3 to 7) is to be based on the affected facility's representative performance consistent with the requirements of §60.8(c). Data demonstrating that the chosen test period is representative shall be submitted to the Administrator for approval with the notification of anticipated startup required under §60.7(a)(2).
- (b) Each owner or operator of an affected coating operation subject to the standard specified in §60.742 (b)(2) (alternative standard for coating operations) shall:
- (1) Demonstrate that a total enclosure is installed. The total enclosure shall either be approved by the Administrator in accordance with the provisions of §60.746, or meet the requirements in paragraphs (b)(1)(i) through (vi) of this section, as follows:
    - (i) The only openings in the enclosure are forced makeup air and exhaust ducts and natural draft openings such as those through which raw materials enter and exist the coating operation;
    - (ii) Total area of all natural draft openings does not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;
    - (iii) All access doors and windows are closed during normal operation of the enclosed coating operation, except for brief, occasional openings to accommodate process equipment adjustments. If such openings are frequent, or if the access door or window remains open for a significant amount of time during the process operation, it must be considered a natural draft opening. Access doors used routinely by workers to enter and exit the enclosed area shall be equipped with automatic closure devices;
    - (iv) Average inward face velocity (FV) across all natural draft openings is a minimum of 3,600 meters per hour as determined by the following procedures:
      - (A) Construct all forced makeup air ducts and all exhaust ducts so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in §60.745 (c) and (d). Volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and
      - (B) Determine FV by Equation 6:
$$FV = \frac{\sum_{j=1}^n Q_{out\ j} - \sum_{i=1}^p Q_{in\ i}}{\sum_{k=1}^q A_k} \quad \text{(Equation 6)}$$
  - (v) The air passing through all natural draft openings flows into the enclosure continuously. If FV is less than or equal to 9,000 meters per hour, the continuous inward airflow shall be verified by continuous observation using smoke tubes,

streamers, tracer gases, or other means approved by the Administrator over the period that the volumetric flow rate tests required to determine FV are carried out. If FV is greater than 9,000 meters per hour, the direction of airflow through the natural draft openings shall be presumed to be inward at all times without verification.

- (vi) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening.
  - (2) Determine the control device efficiency using Equation (1) or Equations (3) and (4), as applicable, and the test methods and procedures specified in §60.745 (b) through (g).
  - (3) Compliance is demonstrated if the installation of a total enclosure is demonstrated and the value of E determined from Equation (1) or the value of Hsys determined from Equations (3) and (4), as applicable, is equal to or greater than 0.95.
- (c) To demonstrate compliance with §60.742(c)(1) (standard for coating mix preparation equipment servicing a coating operation with concurrent construction of a control device that uses at least 130 Mg per year of VOC), each owner or operator of affected coating mix preparation equipment shall demonstrate that:
- (1) Covers meeting the following specifications have been installed and are being used properly:
    - (i) Cover shall be closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with cover in place. Such activities shall be carried out through ports of the minimum practical size;
    - (ii) Cover shall extend at least 2 centimeters beyond the outer rim of the opening or shall be attached to the rim;
    - (iii) Cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter;
    - (iv) Any breach in the cover (such as a slit for insertion of a mixer shaft or port for addition of ingredients) shall be covered consistent with paragraphs (c)(1) (i), (ii), and (iii) of this section when not actively in use. An opening sufficient to allow safe clearance for a mixer shaft is acceptable during those periods when the shaft is in place; and
    - (v) A polyethylene or nonpermanent cover may be used provided it meets the requirements of paragraphs (c)(1)(ii), (iii), and (iv) of this section. Such a cover shall not be reused after once being removed.
  - (2) Procedures detailing the proper use of covers, as specified in paragraph (c)(1)(i) of this section, have been posted in all areas where affected coatings mix preparation equipment is used;
  - (3) The coating mix preparation equipment is vented to a control device while preparation of the coating is taking place within the vessel; and
  - (4) The control device efficiency (E or Hsys, as applicable) determined using Equation (1) or Equations (3) and (4), respectively, and the test methods and procedures specified in §60.745 (b) through (g) is equal to or greater than 0.95.

- (d) To demonstrate compliance with §60.742(c)(2) (standard for coating mix preparation equipment servicing a coating operation that does not have concurrent construction of a control device but uses at least 130 Mg of VOC per year) or §60.742(c)(3) (standard for coating mix preparation equipment servicing a coating operation that uses at least 95 Mg but less than 130 Mg of VOC per year), each owner or operator of affected coating mix preparation equipment shall demonstrate upon inspection that:
- (1) Covers satisfying the specifications in paragraphs (c)(1)(i) through (v) of this section have been installed and are being properly operated and maintained; and
  - (2) Procedures detailing the proper use of covers, as specified in paragraph (c)(1)(i) of this section, have been posted in all areas where affected coating mix preparation equipment is used.
  - (3) Owners or operators meeting the standard specified in §60.742 (c)(2)(ii) or (c)(3)(ii) shall also demonstrate that the coating mix preparation equipment is vented to a control device.
- (e) If a control device other than a carbon adsorber, condenser, or incinerator is used to control emissions from an affected facility, the necessary operating specifications for that device must be approved by the Administrator. An example of such a device is a flare.

**§ 60.744 Monitoring requirements.**

- (a) Each owner or operator of an affected facility shall install and calibrate all monitoring devices required under the provisions of this section according to the manufacturer's specifications, prior to the initial performance test in locations such that representative values of the monitored parameters will be obtained. The parameters to be monitored shall be continuously measured and recorded during each performance test.
- (b) Each owner or operator of an affected facility that uses less than 95 Mg of VOC per year and each owner or operator of an affected facility subject to the provisions specified in §60.742(c)(3) shall:
- (1) Make semiannual estimates of the projected annual amount of VOC to be used for the manufacture of polymeric coated substrate at the affected coating operation in that year; and
  - (2) Maintain records of actual VOC use.
- (c) Each owner or operator of an affected facility controlled by a carbon adsorption system and demonstrating compliance by the procedures described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall carry out the monitoring provisions of paragraph (c)(1) or (2) of this section, as appropriate.
- (1) For carbon adsorption systems with a common exhaust stack for all the individual adsorber vessels, install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the concentration level of organic compounds in either the control device outlet gas stream or in both the control device inlet and outlet gas streams. The outlet gas stream shall be monitored if the percent increase in the concentration level of organic compounds is used as the basis for reporting, as described in §60.747(d)(1)(i). The inlet and outlet gas streams shall be monitored if the percent control device efficiency is used as the basis for reporting, as described in §60.747(d)(2)(i).

- (2) For carbon adsorption systems with individual exhaust stacks for each adsorber vessel, install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the concentration level of organic compounds in the outlet gas stream for a minimum of one complete adsorption cycle per day for each adsorber vessel. The owner or operator may also monitor and record the concentration level of organic compounds in the common carbon adsorption system inlet gas stream or in each individual carbon adsorber vessel inlet stream. The outlet gas streams shall be monitored if the percent increase in the concentration level of organic compounds is used as the basis for reporting, as described in §60.747(d)(1)(ii). In this case, the owner or operator shall compute daily a 3-day rolling average concentration level of organics in the outlet gas stream from each individual adsorber vessel. The inlet and outlet gas streams shall be monitored if the percent control device efficiency is used as the basis for reporting, as described in §60.747(d)(2)(ii). In this case, the owner or operator shall compute daily a 3-day rolling average efficiency for each individual adsorber vessel.
- (d) Each owner or operator of an affected facility controlled by a condensation system and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the temperature of the condenser exhaust stream.
- (e) Each owner or operator of an affected facility controlled by a thermal incinerator and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within  $\pm 1$  percent of the temperature being measured in Celsius degrees.
- (f) Each owner or operator of an affected facility controlled by a catalytic incinerator and demonstrating compliance by the test methods described in §60.743 (a)(1), (2), (b), or (c) (which include control device efficiency determinations) shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the gas temperature both upstream and downstream of the catalyst bed. The monitoring device shall have an accuracy within  $\pm 1$  percent of the temperature being measured in Celsius degrees.
- (g) Each owner or operator of an affected facility who demonstrates compliance by the test methods described in §60.743(a)(1) or (2)(which include vapor capture system efficiency determinations) or §60.743(a)(4) (short-term liquid material balance) shall submit a monitoring plan for the vapor capture system to the Administrator for approval with the notification of anticipated startup required under §60.7 (a)(2) of the General Provisions. This plan shall identify the parameter to be monitored as an indicator of vapor capture system performance (e.g., the amperage to the exhaust fans or duct flow rates) and the method for monitoring the chosen parameter. The owner or operator shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the value of the chosen parameter.
- (h) Each owner or operator of an affected facility who demonstrates compliance as described in §60.743 (b) shall follow the procedures described in paragraph (g) of this section to establish a monitoring system for the total enclosure.
- (i) Each owner or operator of an affected facility shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.

- (j) Each owner or operator of an affected facility shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.
- (k) Records of the measurements and calculations required in §60.743 and §60.744 must be retained for at least 2 years following the date of the measurements and calculations.

**§ 60.745 Test methods and procedures.**

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

- (a) Method 24 is used to determine the VOC content in coatings. If it is demonstrated to the satisfaction of the Administrator that coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern. For Method 24, the coating sample must be a 1-liter sample collected in a 1-liter container at a point in the process where the sample will be representative of the coating applied to the substrate (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is collected. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations that use Method 24 results.
- (b) Method 25 shall be used to determine VOC concentrations from incinerator gas streams. Alternative Methods (18 or 25A), may be used as explained in the applicability section of Method 25 in cases where use of Method 25 is demonstrated to be technically infeasible. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under §60.8(d) of the General Provisions. Except as indicated in paragraphs (b)(1) and (b)(2) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.
  - (1) When the method is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual adsorber vessels pursuant to §60.743 (a)(1), (b), or (c), the test shall consist of three separate runs, each coinciding with one or more complete system rotations through the adsorption cycles of all the individual adsorber vessels.
  - (2) When the method is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each adsorber vessel pursuant to §60.743 (a)(2), (b), or (c), each adsorber vessel shall be tested individually. Each test shall consist of three separate runs, each coinciding with one or more complete adsorption cycles.
- (c) Method 1 or 1A is used for sample and velocity traverses;
- (d) Method 2, 2A, 2C, or 2D is used for velocity and volumetric flow rates;
- (e) Method 3 is used for gas analysis;
- (f) Method 4 is used for stack gas moisture;
- (g) Methods 2, 2A, 2C, or 2D; 3; and 4 shall be performed, as applicable, at least twice during each test run.

**§ 60.746 Permission to use alternative means of emission limitation.**

- (a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions of VOC from any emission point subject to §60.742(c) at least equivalent to that required by §60.742(b)(2) or §60.742(c), respectively, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means. The Administrator may condition permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as specified in §60.742(b)(2) or §60.742(c), respectively.
- (b) Any notice under paragraph (a) of this section shall be published only after public notice and an opportunity for a public hearing.
- (c) Any person seeking permission under this section shall submit to the Administrator either results from an emission test that accurately collects and measures all VOC emissions from a given control device or an engineering evaluation that accurately determines such emissions.

**§ 60.747 Reporting and recordkeeping requirements.**

- (a) For each affected facility subject to the requirements of §60.742(b) and (c), the owner or operator shall submit the performance test data and results to the Administrator as specified in §60.8(a) of this part. In addition, the average values of the monitored parameters measured at least every 15 minutes and averaged over the period of the performance test shall be submitted with the results of all performance tests.
- (b) Each owner or operator of an affected facility subject to the provisions specified in §60.742(c)(3) and claiming to use less than 130 Mg of VOC in the first year of operation and each owner or operator of an affected facility claiming to use less than 95 Mg of VOC in the first year of operation shall submit to the Administrator, with the notification of anticipated startup required under §60.7(a)(2) of the General Provisions, a material flow chart indicating projected VOC use. The owner or operator shall also submit actual VOC use records at the end of the initial year.
- (c) Each owner or operator of an affected facility subject to the provisions of §60.742(c)(3) and initially using less than 130 Mg of VOC per year and each owner or operator of an affected facility initially using less than 95 Mg of VOC per year shall:
  - (1) Record semiannual estimates of projected VOC use and actual 12-month VOC use;
  - (2) Report the first semiannual estimate in which projected annual VOC use exceeds the applicable cutoff; and
  - (3) Report the first 12-month period in which the actual VOC use exceeds the applicable cutoff.
- (d) Each owner or operator of an affected facility demonstrating compliance by the methods described in §60.743(a)(1), (2), (4), (b), or (c) shall maintain records and submit quarterly reports to the Administrator documenting the following:
  - (1) For those affected facilities monitoring only the carbon adsorption system outlet concentration levels of organic compounds, the periods (during actual coating operations) specified in paragraph (d)(1)(i) or (ii) of this section, as applicable.
    - (i) For carbon adsorption systems with a common exhaust stack for all the individual adsorber vessels, all periods of three consecutive system rotations through the adsorption cycles of all the individual adsorber vessels during which the average

value of the concentration level of organic compounds in the common outlet gas stream is more than 20 percent greater than the average value measured during the most recent performance test that demonstrated compliance.

- (ii) For carbon adsorption systems with individual exhaust stacks for each adsorber vessel, all 3-day rolling averages for each adsorber vessel when the concentration level of organic compounds in the individual outlet gas stream is more than 20 percent greater than the average value for that adsorber vessel measured during the most recent performance test that demonstrated compliance.
- (2) For those affected facilities monitoring both the carbon adsorption system inlet and outlet concentration levels of organic compounds, the periods (during actual coating operations), specified in paragraph (d)(2)(i) or (ii) of this section, as applicable.
- (i) For carbon adsorption systems with a common exhaust stack for all the individual adsorber vessels, all periods of three consecutive adsorption cycles of all the individual adsorber vessels during which the average carbon adsorption system efficiency falls below the applicable level as follows:
    - (A) For those affected facilities demonstrating compliance by the performance test method described in §60.743(a)(1), the value of E determined using Equation (1) during the most recent performance test that demonstrated compliance.
    - (B) For those affected facilities demonstrating compliance by the performance test described in §60.743 (a)(4), the average value of the system efficiency measured with the monitor during the most recent performance test that demonstrated compliance.
    - (C) For those affected facilities demonstrating compliance pursuant to §60.743(b) or (c), 0.95.
  - (ii) For carbon adsorption systems with individual exhaust stacks for each adsorber vessel, all 3-day rolling averages for each adsorber vessel during which the average carbon adsorber vessel efficiency falls below the applicable level as follows:
    - (A) For those affected facilities demonstrating compliance by the performance test method described in §60.743(a)(2), (b), or (c), the value of  $H_v$  determined using Equation (3) during the most recent performance test that demonstrated compliance.
    - (B) For those affected facilities demonstrating compliance by the performance test described in §60.743 (a)(4), the average efficiency for that adsorber vessel measured with the monitor during the most recent performance test that demonstrated compliance.
- (3) For those affected facilities monitoring condenser exhaust gas temperature, all 3-hour periods (during actual coating operations) during which the average exhaust temperature is 5 or more Celsius degrees above the average temperature measured during the most recent performance test that demonstrated compliance;
- (4) For those affected facilities monitoring thermal incinerator combustion gas temperature, all 3-hour periods (during actual coating operations) during which the average

combustion temperature of the device is more than 28 Celsius degrees below the average combustion temperature of the device during the most recent performance test that demonstrated compliance;

- (5) For those affected facilities monitoring catalytic incinerator catalyst bed temperature, all 3-hour periods (during actual coating operations) during which the average gas temperature immediately before the catalyst bed is more than 28 Celsius degrees below the average gas temperature during the most recent performance test that demonstrated compliance and all 3-hour periods (during actual coating operations) during which the average gas temperature difference across the catalyst bed is less than 80 percent of the average gas temperature difference during the most recent performance test that demonstrated compliance;
  - (6) For each affected facility monitoring a total enclosure pursuant to §60.744(h) or vapor capture system pursuant to §60.744(g), all 3-hour periods (during actual coating operations) during which the average total enclosure or vapor capture system monitor readings vary by 5 percent or more from the average value measured during the most recent performance test that demonstrated compliance.
  - (7) Each owner or operator of an affected coating operation not required to submit reports under paragraphs (d)(1) through (6) of this section because no reportable periods have occurred shall submit semiannual statements clarifying this fact.
- (e) Each owner or operator of an affected coating operation, demonstrating compliance by the test methods described in §60.743(a)(3) (liquid-liquid material balance) shall submit the following:
- (1) For months of compliance, semiannual reports to the Administrator stating that the affected coating operation was in compliance for each 1-month period; and
  - (2) For months of noncompliance, quarterly reports to the Administrator documenting the 1-month amount of VOC contained in the coatings, the 1-month amount of VOC recovered, and the percent emission reduction for each month.
- (f) Each owner or operator of an affected coating operation, either by itself or with associated coating mix preparation equipment, shall submit the following with the reports required under paragraphs (d) and (e) of this section:
- (1) All periods during actual mixing or coating operations when a required monitoring device (if any) was malfunctioning or not operating; and
  - (2) All periods during actual mixing or coating operations when the control device was malfunctioning or not operating.
- (g) The reports required under paragraphs (b), (c), (d), and (e) of this section shall be postmarked within 30 days of the end of the reporting period.
- (h) Records required in §60.747 must be retained for at least 2 years.
- (i) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In this event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

**§ 60.748 Delegation of authority.**

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authorities that will not be delegated to States: §§60.743(a)(3)(v)(A) and (B); 60.743(e); 60.745(a); 60.746.

**Reference**

The US EPA Electronic Code of Federal Regulations - 40 CFR 60, Subpart VVV: Standards of Performance for Polymeric Coating of Supporting Substrates Facilities web address:  
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=c6282583c7d24b0fcade1e92f9e42409&rqn=div6&view=text&node=40:6.0.1.1.1.87&idno=40>

# Indiana Department of Environmental Management

## Office of Air Quality

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

#### Source Background and Description

Source Name:	Parker Hannifin Corporation, Process Filtration Division
Source Location:	2002 Main St, Tell City, IN 47586
County:	Perry
SIC Code:	2269
Permit Renewal No.:	123-26509-00015
Permit Reviewer:	Hannah L. Desrosiers

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Parker Hannifin Corporation, Process Filtration Division, relating to the operation of a stationary filtration products manufacturing source.

#### History

On May 8, 2008, Parker Hannifin Corporation, Process Filtration Division, submitted an application to the OAQ requesting to renew its operating permit. Parker Hannifin Corporation, Process Filtration Division, was issued a New Source FESOP on February 2, 2004.

#### Permitted Emission Units and Pollution Control Equipment

- (a) One (1) PCC Flo Pak process, including the curing process, identified as EU-1c, installed in 1994, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour, uncontrolled and exhausting to Stacks J-1, J-2, J-3, and J-4; [326 IAC 8-1-6]
- (b) One (1) Carbon Cartridge End Cap Adhesion process, identified as EU-2, installed in 1991, with a maximum capacity of seven hundred eighty-four ten-thousandths (0.784) pounds of adhesive per hour, uncontrolled and exhausting to Stack B;
- (c) One (1) Needled Media process, identified as EU-4, installed in 1985, with a maximum capacity of six hundred eighty-two (682) pounds of media per hour, controlled by dust collector DC-3, and exhausting to Stack H; [326 IAC 6-3-2]
- (d) One (1) Flo Pak Plastisol process, identified as EU-5, installed in 1994, with a maximum capacity of sixteen and thirty-five hundredths (16.35) pounds of plastisol per hour, uncontrolled, and exhausting to Stack S-6; and
- (e) One (1) Pro-Bond process, consisting of the following equipment:
  - (1) One (1) Resin Impregnator, identified as R-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour and one and three tenths (1.3) pounds of resin per log, uncontrolled and exhausting to the plant interior;  
  
Under NSPS Subpart VVV, this is considered an affected coating operation.
  - (2) One (1) Cut and Pack process, identified as CP-1, installed in 2001, with a maximum capacity of one hundred eighty (180) logs per hour, controlled by dust collector DC-1, and exhausting to the plant interior. [326 IAC 6-3-2]

### **Emission Units and Pollution Control Equipment Removed From the Source**

- (a) One (1) manual spray booth, identified as MB-1, installed in 1998, using high volume, low pressure (HVLP) spray equipment and dry filters for overspray control, exhausting to Stack S-5, capacity: 25 steel vessels per hour.
- (b) One (1) natural gas-fired boiler, identified as B-1, installed in 1958, exhausting to Stack S-7, rated at 2.68 million British thermal units per hour. [326 IAC 6-2-3]

### **Insignificant Activities**

- (a) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone, and including; [326 IAC 6-3-2]
  - (1) One (1) Paper Trimming Operation, identified as EU-1a, with a maximum capacity of one hundred sixty-seven (167) pounds of paper per hour (lbs/hr), controlled by a cyclone (C-1), exhausting to a fabric filter (DC-2), and then to the plant interior;
  - (2) Three (3) Roving Reclamation Units, including one (1) cutter, one (1) chopper and one (1) opener, identified as RR-1, RR-2, and RR-3, consecutively, with a maximum capacity of three hundred seventy-five (375) lbs per hour, each, controlled by dust collectors DC-4 through DC-6, and exhausting to the plant interior;
- (b) One (1) Fiberglass Baking process, identified as EU-3, installed in 1974, with a maximum capacity of ninety-two and fifty-seven hundredths (92.57) pounds of fiberglass per hour, uncontrolled and exhausting to Stack D;
- (c) One (1) Production Welding Station, identified as W-1, and other non-production related welding and flame cutting activities, using less than six hundred and twenty-five (625) pounds of wire or rod per day, combined, uncontrolled and exhausting to the plant interior, and including the following;
  - (1) Three (3) Metal Inert Gas (MIG)(carbon steel) welding stations;
  - (2) One (1) Stick (E7018 electrode) welding station;
  - (3) One (1) Tungsten Inert Gas (TIG)(carbon steel) welding station;
  - (4) One (1) Oxyacetylene (carbon steel) welding station;
  - (5) One (1) Oxyacetylene flame cutting station;
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:
  - (1) One (1) natural gas-fired cure oven, identified as PC-1, installed in 2001, with a maximum heat input capacity of one and six tenths (1.6) million British thermal units per hour, and exhausting to Stack S-1;
  - (2) One (1) natural gas-fired cure oven, identified as FC-1, installed in 2001, with a maximum heat input capacity of two and seventy-five hundredths (2.75) million British thermal units per hour, uncontrolled and exhausting to Stack S-2;

- (3) One (1) natural gas-fired cure oven, identified as SC-1, installed in 2001, with a maximum heat input capacity of thirty-five hundredths (0.35) million British thermal units per hour, uncontrolled and exhausting to Stack S-3;
  - (4) One (1) natural gas-fired oven, identified as CO, with a maximum heat input capacity of thirty-five hundredths (0.35) million British thermal units per hour, uncontrolled and exhausting to the plant interior;
  - (5) One (1) natural gas-fired oven, identified as EU-1b, installed in 1994, with a maximum heat input capacity of two and eight tenths (2.8) million British thermal units per hour; uncontrolled, and exhausting to Stacks J-1, J-2, J-3, and J-4;
  - (6) Miscellaneous natural gas-fired heaters and air make-up units, collectively identified as H-1, with a combined maximum heat input capacity of two and seven hundred sixty-four thousandths (2.764) million British thermal units per hour, uncontrolled, and exhausting to the plant interior;
- (e) The following Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) storage containers: Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids;
  - (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings;
  - (g) Closed loop heating and cooling systems;
  - (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
  - (i) Paved and unpaved roads and parking lots with public access;
  - (j) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
  - (k) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
  - (l) Other emergency equipment as follows: Stationary fire pumps; and
  - (m) Other activities or categories not previously identified: Bubble point test; using isopropyl alcohol.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Emission Calculations**

See Appendix A of this document for detailed emission calculations.

IDEM has determined that pursuant to 40 CFR 63.62, the Diethylene glycol (111-46-6) contained in the fiberglass, less than 2% by weight, used by this existing stationary filtration products manufacturing source, is not a Hazardous Air Pollutant (HAP). Therefore, the glycol emissions from the one (1) fiberglass baking process, identified as EU-3, installed in 1974, exhausting to Stack D, have been removed from the calculations. Additionally, this unit has been demoted from a regulated emission unit to an insignificant

activity because its emissions have become insignificant, as defined in 326 IAC 2-7-1(21). This unit no longer requires limitation, and there are no applicable requirements.

### County Attainment Status

The source is located in Perry County

The following attainment status designations are applicable to Perry County:

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. ➤ Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Perry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Perry County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Other Criteria Pollutants

Perry County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (d) **Fugitive Emissions**  
 Although, this existing stationary filtration products manufacturing source uses glass fibers to manufacture filtration products, it is not engaged in making glass fiber. Hence, the source does not meet the definition of a glass fiber processing plant, as described in EPA's August 1988 policy memo on "Glass Fiber Processing Plants" as those facilities which are engaged only in making glass fibers. Consequently, the source is not one (1) of the twenty-eight (28) source categories, as specified in 326 IAC 2-2-1(gg)(1) or 326 IAC 2-3-2(g)(24). Additionally, there are no applicable New Source Performance Standards that were in effect on August 7, 1980, therefore, fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	47.47
PM10 <sup>(1)</sup>	47.73
PM2.5	47.64
SO2	0.03
NOx	4.65
VOC	60.73
CO	3.91

- (1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". Additionally, US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than one hundred (100) tons per year.

HAPs	tons/year
Methanol	38.92
Phenol	17.01
Formaldehyde	9.37
Vinyl Acetate	2.00
DEHP	1.43
Hexane	0.08
Manganese	0.01
<b>Total</b>	<b>68.83</b>
<b>Worst Single</b>	<b>38.92</b>

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has agreed to continue to limit their single HAP emissions and total HAP emissions below Title V limits. Therefore, the source will be issued a FESOP Renewal.
- (c) Although, this existing stationary filtration products manufacturing source uses glass fibers to manufacture filtration products, it is not engaged in making glass fiber. Hence, the source does not meet the definition of a glass fiber processing plant, as described in EPA's August 1988 policy memo on "Glass Fiber Processing Plants" as those facilities which are engaged only in making glass fibers. Consequently, the source is not one (1) of the twenty-eight (28) source categories, as specified in 326 IAC 2-7-1(22)(B). Therefore, fugitive emissions are not counted toward the determination of Part 70 applicability.

Appendix A of this TSD, page 1 of 7, reflects the unrestricted potential emissions of the source.

### Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10 *	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
PCC Flo Pak Process (EU-1c)	-	-	-	-	-	< 25 <sup>(2)</sup>	-	< 24.9 <sup>(2)</sup>	< 9.9 <sup>(2)</sup> Methanol
Carbon Cartridge End Cap Adhesion (EU-2)	-	-	-	-	-	1.27	-		< 9.9 <sup>(2)</sup> Vinyl Acetate
Flo Pak Plastisol (EU-5)	-	-	-	-	-	1.43	-		< 9.9 <sup>(2)</sup> DEHP
Pro Bond Process (R-1)	-	-	-	-	-	19.37	-		< 9.9 <sup>(2)</sup> Phenol
Fiberglass Baking Process (EU-3)	-	-	-	-	-	negl.	-	negl.	negl.
Cut and Pack Process <sup>(1)</sup> (CP-1)	0.02	0.02	0.02	-	-	-	-	-	-
Needled Media Process <sup>(1)</sup> (EU-4)	5.91	5.91	5.91	-	-	-	-	-	-
Welding Operations (W-1)	0.23	0.23	0.23	-	-	-	-	0.01	0.01 Manganese
Natural Gas Combustion	0.09	0.35	0.26	0.03	4.65	0.26	3.91	0.09	0.08 Hexane
Roving Reclamation (RR-1, RR-2, RR-3)	0.08	0.08	0.08	-	-	-	-	-	-
Paper Trimming (EU-1a)	negl.	negl.	negl.	-	-	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>6.34</b>	<b>6.60</b>	<b>6.52</b>	<b>0.03</b>	<b>4.65</b>	<b>47.33</b>	<b>3.91</b>	<b>&lt; 25</b>	<b>&lt; 10</b>
Title V Major Source Thresholds	NA	100	-	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

negl. = negligible

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". Additionally, US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

<sup>(1)</sup> Potential to emit after controls.

<sup>(2)</sup> Potential to emit after FESOP limits.

(a) FESOP Status

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source is less than the Title V major source threshold levels. In addition, this existing source is not a major source of Hazardous Air Pollutants (HAPs), as defined in 40 CFR 63.41, because the potential to emit HAPs will continue to be limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year of total HAPs. Therefore, this source is considered an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

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

- (1) The input of any single HAP to the PCC Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion Process (EU-2), the Flo Pak Plastisol Process (EU-5), or the Pro Bond Process (R-1), shall be less than nine and nine tenths (9.9) tons per twelve (12) consecutive month period with compliance determined at the end of each month; and
- (2) The input of any combination of HAPs to the Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion Process (EU-2), the Flo Pak Plastisol Process (EU-5), and the Pro Bond Process (R-1), combined, shall be less than twenty-four and eight tenths (24.8) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)), 326 IAC 12 (NSPSS) and 326 IAC 20 (NESHAPs) not applicable.

(b) PSD Minor Source

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all criteria pollutants is less than two hundred fifty (250) tons per year, and although, this existing stationary filtration products manufacturing source uses glass fibers to manufacture filtration products, it is not engaged in making glass fiber. Hence, the source does not meet the definition of a glass fiber processing plant, as described in EPA's August 1988 policy memo on "Glass Fiber Processing Plants" as those facilities which are engaged only in making glass fibers. Consequently, the source is not one (1) of the twenty-eight (28) source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) Fugitive emissions

Although, this existing stationary filtration products manufacturing source uses glass fibers to manufacture filtration products, it is not engaged in making glass fiber. Hence, the source does not meet the definition of a glass fiber processing plant, as described in EPA's August 1988 policy memo on "Glass Fiber Processing Plants" as those facilities which are engaged only in making glass fibers. Consequently, the source is not one (1) of the twenty-eight (28) source categories, as specified in 326 IAC 2-2-1(gg)(1), 326 IAC 2-3-2(g)(24) or 326 IAC 2-7-1(22)(B). Additionally, there are no applicable New Source Performance Standards that were in effect on August 7, 1980, therefore, fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

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## Federal Rule Applicability

The following federal rules are applicable to the proposed renewal:

### New Source Performance Standards (NSPS)

- (a) 40 CFR 60, Subpart VVV - Standards for Polymeric Coating of Supporting Substrates Facilities

Pursuant to 40 CFR 60.740, affected facilities include each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates, as defined in § 60.741, for which construction, modification, or reconstruction begins after April 30, 1987, except for those facilities specifically exempted in §60.740(d). The source impregnates needled media, a mat composed of acrylic and polyester fibers, with phenolic resin during the Resin Impregnation phase (R-1) of their Pro-Bond process. Therefore, this existing stationary filtration products manufacturing source is subject to the New Source Performance Standard for Polymeric Coating Of Supporting Substrates Facilities, 40 CFR 60 Subpart VVV (326 IAC 12), and the applicable requirements are included in the renewal for this facility. This is a new requirement for this source.

Pursuant to §60.740(b), since the amount of VOC used is less than ninety-five (95) megagrams (Mg) (one hundred four and seven tenths (104.7) tons) per twelve (12) month period, and since there is no coating mix preparation equipment onsite, the Resin Impregnator (R-1) is only subject to the following portions of 40 CFR 60, Subpart VVV:

- (1) 40 CFR 60.744(b);
- (2) 40 CFR 60.747(b);
- (3) 40 CFR 60.747(c);
- (4) 40 CFR 60.747(g); and
- (5) 40 CFR 60.747(h).

Nonapplicable portions of the NSPS will not be included in the permit.

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the Resin Impregnator (R-1), except when otherwise specified in 40 CFR 60 Subpart VVV.

- (b) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included for this renewal.

### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) 40 CFR 63, Subpart U— NESHAPs: Group I Polymers and Resins

Pursuant to 63.480, the provisions of this subpart apply to each group of one or more elastomer product process units (EPPU) and associated equipment, that manufactures the same primary [elastomer] product and that is located at a plant site that is a major source, unless specifically exempted by §63.480(c). This existing stationary filtration products manufacturing source does not manufacture an elastomer product, as defined in §63.482, and the source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Group I Polymers and Resins, 40 CFR 63 Subpart U, still do not apply to this source, and the requirements are not included in this renewal.

- (b) 40 CFR 63, Subpart JJJ - NESHAPs: Group IV Polymers and Resins  
Pursuant to 63.480, the provisions of this subpart apply to each group of one or more thermoplastic product process units (TPPU) and associated equipment, that manufactures the same primary [thermoplastic] product and that is located at a plant site that is a major source, unless specifically exempted by §63.1310(d). This existing stationary filtration products manufacturing source does not manufacture a thermoplastic product, as defined in §63.1312(b), and the source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Group I Polymers and Resins, 40 CFR 63, Subpart JJJ, still do not apply to this source, and the requirements are not included in this renewal.
- (c) 40 CFR 63, Subpart JJJJ - NESHAPs: Paper and Other Web Coating  
Pursuant to 63.3290, this rule applies to each new and existing facility that is a major source of HAP, as defined in §63.2, at which web coating lines are operated, unless specifically exempted by §63.3300(a) through §63.3300(g), or otherwise regulated by another NESHAP. Although this existing stationary filtration products manufacturing source applies surface coatings to pre-cut cellulosic paper, and acrylic and polyester fiber matting, these facilities would otherwise be subject to 40 CFR 63 Subpart OOOO, per §63.3300(f). Also, the source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ, still do not apply to this source, and the requirements are not included in this renewal.
- (d) 40 CFR 63, Subpart MMMM - NESHAPs for Surface Coating of Miscellaneous Metal Parts and Products  
Pursuant to 40 CFR 63.3881, this rule applies to sources that own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses nine hundred forty-six (946) liters (two hundred fifty (250) gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in 63.3881 (a); and that is a major source, is located at a major source, or is part of a major source of emissions of HAP, as defined in 40 CFR 63.2. Although this existing stationary filtration products manufacturing source applies adhesives to metal end caps, the source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM, still do not apply to this source, and the requirements are not included in the in this renewal.
- (e) 40 CFR 63, Subpart OOOO - NESHAPs: Printing, Coating, and Dyeing of Fabrics and Other Textiles  
Pursuant to 63.4281, this rule applies to sources that own or operate a new, reconstructed, or existing affected source, as defined in §63.4282, that is a major source, is located at a major source, or is part of a major source of hazardous air pollutants (HAP). Although this existing stationary filtration products manufacturing source applies surface coatings to pre-cut cellulosic paper, and acrylic and polyester fiber matting, the source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Printing, Coating, and Dyeing of

Fabrics and Other Textiles, 40 CFR 63 Subpart OOOO, still do not apply to this source, and the requirements are not included in the in this renewal.

(f) 40 CFR 63, Subpart HHHHHH - NESHAPs: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

Pursuant to 40 CFR 63.11170, this rule applies to area sources of HAP as defined in paragraph 63.11170(b), including sources that are part of a tribal, local, State, or Federal facility, who perform the following; paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates, and/or spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations, and mobile repair and refinishing operations that travel to the customer's location, except spray coating applications that meet the definition of facility maintenance in §63.11180, using coatings that contain target HAPs, as defined in §63.11180, to a plastic and/or metal substrate on a part or product, except spray coating applications that meet the definition of facility maintenance or space vehicle in §63.11180. While this existing stationary filtration products manufacturing source continues to limit the potential HAP emissions to less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs, and therefore meets the definition of an area source as defined in 40 CFR §63.2, this source does not perform paint stripping using MeCl and the surface coating operations performed at this source are not of a type as described. Additionally, the coatings used at this source do not contain any target HAPs as defined in §63.11180. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH, do not apply to this source, and the requirements are not included in the in this renewal.

(g) 40 CFR 63, Subpart T - NESHAPs for Halogenated Solvent Cleaning

Pursuant to 40 CFR 63.460(a), affected facilities include each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than five (5) percent by weight, as a cleaning and/or drying agent. This existing stationary filtration products manufacturing source does not use a cold solvent cleaning machine of a type listed, or any degreasing solvent that contains any of the listed halogenated compounds. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63 Subpart T, still do not apply to this source, and the requirements are not included in the in this renewal.

(h) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this renewal.

Compliance Assurance Monitoring (CAM)

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

## State Rule Applicability

The following state rules are applicable to the proposed renewal:

### Entire Source:

- (a) 326 IAC 2-8-4 (FESOP)  
FESOP applicability is discussed under the "Potential to Emit After Issuance" section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))  
PSD applicability is discussed under the "Potential to Emit After Issuance" section above.
- (c) 326 IAC 2-3 (Emission Offset)  
Pursuant to 326 IAC 2-3-2(a), this rule applies to new major stationary sources or major modifications constructed in an area designated, as of the date of submittal of a complete application, as nonattainment in 326 IAC 1-4, for a pollutant for which the stationary source or modification is major. Perry County has been designated as attainment for all criteria pollutants, and this source is not considered a major source because the potential to emit HAPs will continue to be limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year of total HAPs, pursuant to 326 IAC 2-8-4 (FESOP). Therefore, the requirements of 326 IAC 2-3 (Emission Offset) still do not apply to this source, and the requirements are not included in this renewal.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The unlimited potential to emit HAPs from the PCC Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion Process (EU-2), the Flo Pak Plastisol Process (EU-5), or the Pro Bond Process (R-1), are greater than ten (10) tons per year for any single HAP and greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall continue to limit the potential to emit of HAPs from processes at EU-1c, EU-2, EU-5, and R-1 to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the source is still not subject to the requirements of 326 IAC 2-4.1, and the requirements are not included in this renewal. See the "Potential to Emit After Issuance" section above.
- (e) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1(a), this rule applies to any source required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and/or any source located in Lake, Porter, or LaPorte counties that emit volatile organic compounds (VOC) or oxides of nitrogen (NOx) into the ambient air at levels equal to or greater than twenty-five (25) tons per year, and/or any source that emits lead into the ambient air at levels equal to or greater than five (5) tons per year. Additionally, pursuant to 326 IAC 2-6-1(b), all sources permitted by the department are subject to Section 5 of this rule, additional information requests. This source is not required to have an operating permit under 326 IAC 2-7 (Part 70), is not located in Lake, Porter, or LaPorte County, and does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year. Therefore, this source is only subject to the provisions of 326 IAC 2-6-5 (Additional information requests).
- (f) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
  - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4-1, this rule applies to all sources of fugitive dust; (i.e., the generation of particulate matter to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located). Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the existing source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
Pursuant to 326 IAC 6-5-1, this rule applies to all sources of fugitive particulate matter emissions located in nonattainment areas for particulate matter as designated by the board (except for such a source located in Lake County), which have potential fugitive particulate matter emissions of twenty-five (25) tons per year or more. Perry County has been designated as attainment for all criteria pollutants. Therefore, the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) still do not apply to this source, and the requirements are not included in this renewal.
- (i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
Pursuant to 326 IAC 8-1-6 new facilities are subject only if they have potential emissions of twenty-five (25) tons of VOC or more per year, or are not otherwise regulated by other provisions of Article 8.
- (1) The unlimited potential VOC emissions from the Cut and Pack Process (CP-1), Needled Media Process (EU-4), Welding and Thermal Cutting (W-1), Natural Gas Combustion Units (PC-1, FC-1, SC-1, CO, EU-1b, and H-1), Paper Trimming Operation (EU-1a), and three (3) Roving Reclamation Units, including the Roving Cutter (RR-1), Roving Chopper (RR-2) and Roving Opener (RR-3), are each less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 General Reduction Requirements still do not apply to the listed emission units, are not included in this renewal for those units.
- (2) The applicability of all emission units involved in surface coating, including the PCC Flo Pak process (EU-1c), Carbon Cartridge End Cap Adhesion Process (EU-2), Flo Pak Plastisol Process (EU-5), and Pro Bond Process (R-1), are specifically addressed in the surface coating section below.
- (j) 326 IAC 12 (New Source Performance Standards)  
Pursuant to 326 IAC 12-1-1, this article applies to the owner or operator of any stationary source and incorporates by reference 40 CFR 60 New Source Performance Standards. If the emission limitations contained in this article conflict with or are inconsistent with any other emission limitations established by this title, then the more stringent limitation shall apply.
- (1) The Resin Impregnator (R-1) is required to comply with the requirements of 40 CFR 60, Subpart VVV - Standards of Performance for Polymeric Coating of Supporting Substrates Facilities, as described in the "Federal Rule Applicability" section of this TSD.

- (k) 326 IAC 20 (Hazardous Air Pollutants)  
Pursuant to 326 IAC 20-1-1, this article applies to any source, or facility anywhere in the state, for which a standard is prescribed under this article unless otherwise specified in individual standards, and incorporates by reference National Emissions Standards for Hazardous Air Pollutants 40 CFR 63 Subpart A\* General Provisions. If the emission limitations contained in this article conflict with or are inconsistent with any other emission limitations established by this title, then the more stringent limitation shall apply.
- (1) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the renewal for this source. See the "Federal Rule Applicability" section of this TSD.

Surface Coating:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to 326 IAC 6-3-1(b)(6) and (7), surface coating operations using roll and flow coating are specifically exempted from the rule.

This source applies adhesives using flow coating, to attach end caps to carbon or pleated cellulosic filter cartridges (Carbon Cartridge End Cap Adhesion Process (EU-2) and Flo Pak Plastisol Process (EU-5)), and roll coating, to apply phenolic resin to needled media matting (Pro Bond Process (R-1)). Therefore, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to the adhesive coating and resin impregnation operations at this source, and are not included in the permit.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
Pursuant to 326 IAC 8-1-6 new facilities are subject only if they have potential emissions of twenty-five (25) tons of VOC or more per year, or are not otherwise regulated by other provisions of Article 8.
- (1) While the PCC Flo Pak process, identified as EU-1c, is not otherwise regulated by other provisions of Article 8, the unlimited potential VOC emissions are greater than twenty-five (25) tons per year. However, the source shall continue to limit the potential VOC emissions from the PCC Flo Pak process to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 still do not apply, and are not included in the renewal for this unit.

In order to render the requirements of 326 IAC 8-1-6 not applicable, the PCC Flo Pak process shall continue to be limited as follows:

- (A) The total VOC input to the one (1) PCC Flo Pak process, including the curing process, identified as EU-1c, installed in 1994, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month, including coatings, dilution solvents, and cleaning solvents.

Compliance with these limits shall continue to limit the potential to emit VOC from the PCC Flo Pak process to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

- (2) The Carbon Cartridge End Cap Adhesion Process (EU-2), Flo Pak Plastisol Process (EU-5), and Pro Bond Process (R-1) are not otherwise regulated by other provisions of Article 8, however, the unlimited potential VOC emissions are less than twenty-five (25) tons per year, each. Therefore, the requirements of 326 IAC 8-1-6 General Reduction Requirements still do not apply to units EU-2, EU-5, and R-1, and are not included in this renewal for those units.

See Appendix A for the detailed calculations.

- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating)  
Pursuant to 326 IAC 8-2-1(a)(4) and §8-2-9(a)(5), affected facilities include any industrial category which coats metal parts or products under the Standard Industrial Classification Code of major groups #33 through #39, constructed after July 1, 1990, located in any county, and which have actual emissions of greater than fifteen (15) pounds of VOCs per day before add-on controls. While this source, located in Perry County, was constructed after the applicability date of July 1, 1990, and has actual emissions of greater than fifteen (15) pounds of VOCs per day before add-on controls, it coats metal parts or products under the Standard Industrial Classification Code of Major Group 22: Textile Mill Products. Therefore requirements of 326 IAC 8-2-9 Miscellaneous Metal Coating still do not apply to the adhesive coating operations at this source, and are not included in this renewal.
- (d) There are no other 326 IAC 8 Rules that are applicable to this source.

Needed Media:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to §6-3-2(e)(1), interpolation of the data for a process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Therefore, when operating at a process weight rate of six hundred eighty-two (682) pounds per hour the particulate matter (PM) from the one (1) Needed Media Process, identified as EU-4, shall be limited to one and ninety-nine hundredths (1.99) pounds of PM per hour.

Based on Appendix A calculations, the potential PM emission rate, after controls, is:

$$5.91 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 1.35 \text{ lbs/hr}$$

The controlled PM emissions from the needed media process are one and thirty-five hundredths (1.35) pounds of PM per hour, which, is less than the allowable of one and ninety-nine hundredths (1.99) pounds of PM per hour. Therefore, the needed media process is in compliance with this rule.

The fabric dust collector (DC-3) shall be in operation at all times that EU-4 is in operation, in order to comply with this limit.

### Cut and Pack:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to §6-3-2(e)(1), interpolation of the data for a process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Therefore, when operating at a process weight rate of two hundred sixty-six (266) pounds per hour the particulate matter (PM) from the one (1) Cut and Pack Process, identified as CP-1, shall be limited to one and six hundredths (1.06) pounds of PM per hour.

Based on Appendix A calculations, the potential PM emission rate, after controls, is:

$$0.025 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.006 \text{ lbs/hr}$$

The controlled PM emissions from the cut and pack process are six thousandths (0.006) of a pound of PM per hour, which is less than the allowable of one and six hundredths (1.06) pounds of PM per hour. Therefore, the cut and pack process is in compliance with this rule.

The fabric dust collector (DC-1) shall be in operation at all times that CP-1 is in operation, in order to comply with this limit.

### Welding:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to 326 IAC 6-3-1(b)(9), welding operations that consume less than six hundred twenty-five (625) pounds of rod or wire per day, are specifically exempted from the rule.

The one (1) production welding station, identified as W-1, and other non-production related welding activities, combined, consume less than six hundred twenty-five (625) pounds of rod or wire per day. Therefore, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to the production welding station, identified as W-1, and other non-production related welding activities at this source, and are not included in the permit.

### Natural Gas Combustion:

- (a) 326 IAC 4-2-2 (Incinerators)  
Pursuant to 326 IAC 6-3-1(a), affected facilities include incinerators which emit regulated pollutants located anywhere in the state. The natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour

(mmBtu/hr); identified as PC-1, FC-1, SC-1, CO, EU-1b, and H-1, are each not incinerators, as defined by 326 IAC 1-2-34, since they do not burn waste substances. Therefore, 326 IAC 4-2-2 still does not apply to units PC-1, FC-1, SC-1, CO, EU-1b, and H-1, and the requirements are not included in this renewal.

(b) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

Pursuant to 326 IAC 6-2-1(a), particulate emissions from combustion of fuel for indirect heating from all facilities located in Lake, Porter, Marion, Boone, Hamilton, Hendricks, Johnson, Morgan, Shelby, and Hancock Counties, which were existing and in operation or which received permit to construct prior to September 21, 1983, shall be limited according to §6-2-2. The natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour (mmBtu/hr); identified as PC-1, FC-1, SC-1, CO, EU-1b, and H-1, are each not sources of indirect heating, as defined in 326 IAC 1-2-19 "Combustion for Indirect Heating". Therefore, 326 IAC 6-2-2 still does not apply to units PC-1, FC-1, SC-1, CO, EU-1b, and H-1, and the requirements are not included in this renewal.

(c) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable. Additionally, pursuant to 326 IAC 6-3-1(a), activities that do not meet the definition of a "manufacturing process", as defined in 326 IAC 6-3-1.5(2), are also specifically exempted from 326 IAC 6-3. The natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour (mmBtu/hr); identified as PC-1, FC-1, SC-1, CO, EU-1b, and H-1, each do not meet the definition of a "manufacturing process", and are therefore each exempt from the requirements of 326 IAC 6-3. Consequently, 326 IAC 6-3 still does not apply to units PC-1, FC-1, SC-1, CO, EU-1b, and H-1, and the requirements are not included in this renewal.

(d) 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations)

Pursuant to 326 IAC 7-1.1, this rule applies to all emissions units with a potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. The potential emissions from each of the natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour (mmBtu/hr) identified as PC-1, FC-1, SC-1, CO, EU-1b, and H-1, are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively, combined. Therefore, 326 IAC 7-1.1-2 still does not apply to units PC-1, FC-1, SC-1, CO, EU-1b, and H-1, and the requirements are not included in this renewal.

Paper Trimming Operations:

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to §6-3-2(e)(1), interpolation of the data for a process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Therefore, when operating at a process weight rate of one hundred sixty-seven (167) pounds per hour the particulate matter (PM) from the one (1) Paper Trimming Operation, identified as EU-1a, shall be limited to seventy-eight hundredths (0.78) pounds of PM per hour.

Based on Appendix A calculations, the uncontrolled potential particulate emission rate is:

$$2.66 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.61 \text{ lbs/hr}$$

The uncontrolled potential particulate emissions from the paper trimming operation are sixty-one hundredths (0.61) pounds of PM per hour, which is less than the allowable of seventy-eight hundredths (0.78) pounds of PM per hour. Therefore, the paper trimming operation is in compliance with this rule.

#### Roving Reclamation Units:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(a), particulate emissions from manufacturing processes, located anywhere in the state, unless specifically exempted by §6-3-1(b) shall follow the work practices and control technologies contained in §6-3-2, subsections (b) through (d), or be limited according to §6-3-2(e), as applicable.

Pursuant to §6-3-2(e)(1), interpolation of the data for a process weight rate between one hundred (100) pounds per hour and sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Therefore, when operating at a process weight rate of three hundred seventy-five (375) pounds per hour the particulate matter (PM) from the one (1) Roving Cutter, identified as RR-1, the one (1) Roving Chopper, identified as RR-2, and the one (1) Roving opener, identified as RR-3, shall each be limited to one and thirty-four hundredths (1.34) pounds of particulate per hour.

Based on Appendix A calculations, the uncontrolled potential particulate emission rate is:

$$2.63 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.60 \text{ lbs/hr}$$

The uncontrolled potential particulate emissions from the roving cutter, roving chopper, and roving opener, each, are sixty hundredths (0.60) pounds of PM per hour, which is less than the allowable of one and thirty-four hundredths (1.34) pounds of PM per hour, each. Therefore, the roving cutter, roving chopper, and roving opener processes are each in compliance with this rule.

### **Compliance Determination, Monitoring, Testing, Recordkeeping, and Reporting Requirements**

#### Compliance Determination

- (a) The existing PCC Flo Pak process (EU-1c), including the curing process, continues to have applicable compliance determination conditions as specified below:

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Emission Unit/Control	Operating Parameters	Method
PCC Flo Pak process (EU-1c)	VOC content	Preparing or obtaining the "as supplied" and "as applied" VOC and HAP data sheets
		Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4
PCC Flo Pak process (EU-1c); Carbon Cartridge End Cap Adhesion process (EU-2); Flo Pak Plastisol process (EU-5); and Resin Impregnator (R-1)	HAP content	Preparing or obtaining the "as supplied" and "as applied" VOC and HAP data sheets
		Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4

- (1) Confirmation of the VOC content of the coatings used in the PCC Flo Pak process (EU-1c) is still required to render the provisions of 326 IAC 8-1-6 (New Facilities; VOC Reduction Requirements) not applicable.
  - (2) Confirmation of the HAP content of the coatings used in the PCC Flo Pak process (EU-1c), Carbon Cartridge End Cap Adhesion process (EU-2), Flo Pak Plastisol process (EU-5), and Resin Impregnator (R-1) is still required to ensure compliance with 326 IAC 2-8 (FESOP) and to render 326 IAC 2-7 (Part 70 Permits) as not applicable.
- (b) Dust Collectors DC-3 and DC-1, for particulate control, shall continue to be in operation and control emissions at all times that the Needled Media process (EU-4) and Cut and Pack process (CP-1), each, are in operation.

Compliance Monitoring Requirements

- (a) The existing Needled Media process (EU-4) and Cut and Pack process (CP-1), each continue to have applicable compliance monitoring conditions as specified below:
- (1) Parametric Monitoring

Control	Parameter	Frequency	Range	Excursions and Exceedances
Dust Collector (DC-3) for the Needled Media process (EU-4)	Water Pressure Drop	Daily	0.5 to 3.0 inches	Response Steps
Dust Collector (DC-1) for the Cut and Pack process (CP-1)	Water Pressure Drop	Daily	1.0 to 4.5 inches	Response Steps

- (A) The calendar quarter inspections for the dust collectors controlling the needled media process (EU-4) and cut and pack process (CP-1) have not been included in the renewal for this source. IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been

removed. Daily pressure drop readings are deemed sufficient to ensure compliance with the 326 IAC 6-3-2 Particulate Emission limitations.

- (2) Broken or Failed Bag Detection  
The Permittee shall maintain the dust collectors controlling the needed media process (EU-4) and cut and pack process (CP-1), and replace broken or failed bags as needed.
- (A) Paragraph (a) of the Broken or Failed Baghouse condition (D.1.8) has been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Condition D.1.6 requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.
- (B) Paragraph (b) of the Broken or Failed Bag Detection condition (D.1.8) has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

These monitoring conditions are still necessary because the dust collectors for the needed media process (EU-4) and the cut and pack process (CP-1) must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

- (b) There continue to be no specific compliance monitoring requirements for the PCC Flo Pak process (EU-1c), the Carbon Cartridge End Cap Adhesion process (EU-2), the Flo Pak Plastisol process (EU-5), the Resin Impregnator (R-1), the Paper Trimming Operation, (EU-1a), the Roving Cutter (RR-1), the Roving Chopper (RR-2), the Roving Opener (RR-3), the Fiberglass Baking process (EU-3), the Production Welding Station (W-1) and other non-production related welding and flame cutting activities, and each of the Natural Gas-Fired Combustion Sources.

#### Testing requirements

- (a) There continue to be no specific testing requirements associated with any of the emission units located at this source.

#### Recordkeeping and Reporting Requirements

- (a) The Permittee shall maintain records of VOC and HAP content, usage and emissions in order demonstrate compliance with the VOC and HAP emission limits;
- (b) The Permittee shall submit a quarterly summary of the VOC input into the PCC Flo Pak process (EU-1c);

- (c) The Permittee shall submit a quarterly summary of the HAP input into PCC Flo Pak process (EU-1c), Carbon Cartridge End Cap Adhesion process (EU-2), Flo Pak Plastisol process (EU-5), and Resin Impregnator (R-1);
- (d) The Permittee shall maintain records once per day of each dust collector's, DC-3 and DC-1, pressure drop during normal operation; and
- (e) The Permittee shall continue to maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

Note: All compliance determination, monitoring, testing, recordkeeping, and reporting requirements associated with emission units removed from the source (i.e., the manual spray booth (MB-1)), have been eliminated from the permit, and therefore are not included in this renewal.

### **Air Quality Impacts from Minor Sources**

Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has determined that a modeling analysis of the Unlimited Potential to Emit (PTE) criteria pollutants from this existing source is unnecessary to estimate whether the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS), since they do not exceed the PSD Significant Emission thresholds, Appendix A, page 12 of 12.

### **Conclusion and Recommendation**

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on May 8, 2008.

The operation of this source shall be subject to the conditions of the attached FESOP Renewal No. 123-26509-00015. The staff recommends to the Commissioner that this FESOP Renewal be approved.

### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Hannah Desrosiers at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations  
Emission Summary**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Category	Uncontrolled Potential Emissions (tons/year)											
	Emissions Generating Activity											
	Pollutant	PCC Flo Pak Process (EU-1c)	Carbon Cartridge End Cap Adhesion (EU-2)	Flo Pak Plastisol (EU-5)	Pro Bond Process (R-1)	Cut and Pack Process (CP-1)	Needled Media Process (EU-4)	Welding and Thermal Cutting (W-1)	Natural Gas Combustion	Paper Trimming (EU-1a)	Roving Reclamation (RR-1, RR-2 & RR-3)	TOTAL
Criteria Pollutants	PM	0	0	0	0	24.78	11.83	0.23	0.09	2.66	7.88	47.47
	PM10*	0	0	0	0	24.78	11.83	0.23	0.35	2.66	7.88	47.73
	PM2.5	0	0	0	0	24.78	11.83	0.23	0.26	2.66	7.88	47.64
	SO2	0	0	0	0	0	0	0	0.03	0	0	0.03
	NOx	0	0	0	0	0	0	0	4.65	0	0	4.65
	VOC	38.40	1.27	1.43	19.37	0	0	0	0.26	0	0	60.73
	CO	0	0	0	0	0	0	0	3.91	0	0	3.91
	Totals	46.667	1.267	1.43226	19.371	0	0	0.006	0.088	0	0	68.83
Hazardous Air Pollutants	Benzene	0	0	0	0	0	0	0	9.76E-05	0	0	9.76E-05
	DEHP	0	0	1.43	0	0	0	0	0	0	0	1.43
	Dichlorobenzene	0	0	0	0	0	0	0	5.58E-05	0	0	5.58E-05
	Formaldehyde	2.19	0	0	7.17	0	0	0	3.49E-03	0	0	9.37
	Hexane	0	0	0	0	0	0	0	0.084	0	0	0.08
	Methanol	35.70	0	0	3.23	0	0	0	0	0	0	38.92
	Phenol	8.05	0	0	8.97	0	0	0	0	0	0	17.01
	Toluene	0	0	0	0	0	0	0	1.58E-04	0	0	1.58E-04
	Vinyl Acetate	0.73	1.27	0	0	0	0	0	0	0	0	2.00
	Cadmium	0	0	0	0	0	0	0	5.11E-05	0	0	5.11E-05
	Chromium	0	0	0	0	0	0	6.39E-13	6.51E-05	0	0	6.51E-05
	Lead	0	0	0	0	0	0	0	2.32E-05	0	0	2.32E-05
	Manganese	0	0	0	0	0	0	5.70E-03	1.77E-05	0	0	0.01
	Nickel	0	0	0	0	0	0	1.71E-08	9.76E-05	0	0	9.76E-05
	Totals	46.667	1.267	1.43226	19.371	0	0	0.006	0.088	0	0	68.83
											<b>Worse Case HAP</b>	<b>38.92</b>

Total emissions based on rated capacity at 8,760 hours/year.

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

Category	Limited/Controlled Potential Emissions (tons/year)											
	Emissions Generating Activity											
	Pollutant	PCC Flo Pak Process (EU-1c)	Carbon Cartridge End Cap Adhesion (EU-2)	Flo Pak Plastisol (EU-5)	Pro Bond Process (R-1)	Cut and Pack Process (CP-1)	Needled Media Process (EU-4)	Welding and Thermal Cutting (W-1)	Natural Gas Combustion	Paper Trimming (EU-1a)	Roving Reclamation (RR-1, RR-2 & RR-3)	TOTAL
Criteria Pollutants	PM	0	0	0	0	0.02	5.91	0.23	0.09	3.99E-04	0.08	6.34
	PM10*	0	0	0	0	0.02	5.91	0.23	0.35	3.99E-04	0.08	6.60
	PM2.5	0	0	0	0	0.02	5.91	0.23	0.26	3.99E-04	0.08	6.52
	SO2	0	0	0	0	0	0	0	0.03	0	0	0.03
	NOx	0	0	0	0	0	0	0	4.65	0	0	4.65
	VOC	< 25	1.27	1.43	19.37	0	0	0	0.26	0	0	47.33
	CO	0	0	0	0	0	0	0	3.91	0	0	3.91
	Totals	< 24.8				0	0	0.006	0.088	0	0	<25
Hazardous Air Pollutants	Benzene	0	0	0	0	0	0	0	9.76E-05	0	0	9.76E-05
	DEHP	0	0	1.43	0	0	0	0	0	0	0	< 9.9
	Dichlorobenzene	0	0	0	0	0	0	0	5.58E-05	0	0	5.58E-05
	Formaldehyde	2.19	0	0	7.17	0	0	0	3.49E-03	0	0	< 9.9
	Hexane	0	0	0	0	0	0	0	0.084	0	0	0.08
	Methanol	35.70	0	0	3.23	0	0	0	0	0	0	< 9.9
	Phenol	8.05	0	0	8.97	0	0	0	0	0	0	< 9.9
	Toluene	0	0	0	0	0	0	0	1.58E-04	0	0	1.58E-04
	Vinyl Acetate	0.73	1.27	0	0	0	0	0	0	0	0	< 9.9
	Cadmium	0	0	0	0	0	0	0	5.11E-05	0	0	5.11E-05
	Chromium	0	0	0	0	0	0	6.39E-13	6.51E-05	0	0	6.51E-05
	Lead	0	0	0	0	0	0	0	2.32E-05	0	0	2.32E-05
	Manganese	0	0	0	0	0	0	0.006	1.77E-05	0	0	0.01
	Nickel	0	0	0	0	0	0	1.71E-08	9.76E-05	0	0	9.76E-05
	Totals	< 24.8				0	0	0.006	0.088	0	0	<25
											<b>Worse Case HAP</b>	<b>&lt;10</b>

Total emissions based on rated capacity at 8,760 hours/year.

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Appendix A: Emissions Calculations**  
**Potential VOC & HAP Emissions Summary**  
**PCC Flo Pak (EU-1c)**

**Company Name:** Parker Hannifin Corporation  
 Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Worst Case Potential from EU-1c

Worst Case Product	Pollutant	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
6022, 6023	Phenol	1.837	8.05
6022, 6023	Formaldehyde	0.501	2.19
6020, 6023	Vinyl Acetate	0.167	0.731
6021	Methanol	8.150	35.7
6021	Total HAPs	8.768	38.4
6021	VOC	8.768	38.4

**Appendix A: Emissions Calculations  
Potential VOC & HAP Emissions  
PCC Flo Pak (EU-1c)**

**Company Name:** Parker Hannifin Corporation  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Product Number	Pollutant	Weight Percent	Usage Rate (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
2431-6020	Phenol	0.55%	167	0.919	4.023
	Formaldehyde	0.22%	167	0.367	1.609
	Vinyl Acetate	0.10%	167	0.167	0.731
	Methanol	1.50%	167	2.505	10.972
	Total HAPs	2.37%	167	3.958	17.336
	VOC	4.12%	167	6.880	30.136
2431-6021	Phenol	0.34%	167	0.568	2.487
	Formaldehyde	0.03%	167	0.050	0.219
	Methanol	4.88%	167	8.150	35.695
	Total HAPs	5.25%	167	8.768	38.402
	VOC	5.25%	167	8.768	38.402
2431-6022	Phenol	1.10%	167	1.837	8.046
	Formaldehyde	0.30%	167	0.501	2.194
	Methanol	1.50%	167	2.505	10.972
	Total HAPs	2.90%	167	4.843	21.212
	VOC	4.65%	167	7.766	34.013
2431-6023	Phenol	1.10%	167	1.837	8.046
	Formaldehyde	0.30%	167	0.501	2.194
	Vinyl Acetate	0.10%	167	0.167	0.731
	Methanol	1.50%	167	2.505	10.972
	Total HAPs	3.00%	167	5.010	21.944
	VOC	4.75%	167	7.933	34.744
2431-6024	Phenol	0.55%	167	0.919	4.023
	Formaldehyde	0.22%	167	0.367	1.609
	Methanol	1.50%	167	2.505	10.972
	Total HAPs	2.27%	167	3.791	16.604
	VOC	4.02%	167	6.713	29.405

**Appendix A: Emissions Calculations**  
**Potential VOC & HAP Emissions**  
**Adhesive Coating and Resin Impregnation**

**Company Name:** Parker Hannifin Corporation  
 Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Carbon Cartridge End Cap Adhesion (EU-2)

Product Name	Pollutant	Weight Percent	Usage Rate (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
Adhesive	Vinyl Acetate	36.88%	0.7843	0.289	1.27
	VOC	36.88%	0.7843	0.289	1.27

Flo Pak Plastisol (EU-5)

Product Name	Pollutant	Weight Percent	Usage Rate (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
Plastisol	DEHP	2.00%	16.35	0.327	1.43
	VOC	2.00%	16.35	0.327	1.43

Pro Bond Process - Resin Impregnation (R-1)

Product Name	Pollutant	Weight Percent	Usage Rate (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
Resin Log *	Phenol	1.00%	234	2.340	8.97
	Formaldehyde	0.80%	234	1.872	7.17
	Methanol	0.36%	234	0.842	3.23
	Total HAPs	2.16%	234	5.054	19.4
	VOC	2.16%	234	5.054	19.4

\* This process must be shut down for cleaning one out of every eight hours, therefore maximum annual production is based on 7665 hrs/yr

**Appendix A: Emission Calculations**  
**Baghouse Operations**  
**Cut and Pack (CP-1) & Needled Media (EU-4) Processes**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
Cut and Pack Process (CP-1)	99.9%	0.00022	3,000.0	5.7	24.8	<b>0.006</b>	0.025
Needled Media Process (EU-4)	50.0%	0.0035	45,000.0	2.7	11.8	<b>1.35</b>	5.91

**Methodology**

Emission = PM = PM10 = PM2.5

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**326 IAC 6-3-2(e) Allowable Rate of Emissions**

Unit ID	Process Weight Rate (maximum materials throughput) (lbs/hr)	Process Weight Rate (maximum materials throughput) (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Cut and Pack Process (CP-1)	266	0.133	<b>1.06</b>	4.65
Needled Media Process (EU-4)	682	0.341	<b>1.99</b>	8.73

**Methodology**

Allowable Emissions (E) (lb/hr) = 4.10(Process Weight Rate)<sup>0.67</sup>

Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)\*8760)/2000

**Appendix A: Emissions Calculations  
Welding and Thermal Cutting**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** #####

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
			PM = PM10	Mn	Ni	Cr	PM = PM10 = PM2.5	Mn	Ni	Cr		
WELDING												
Metal Inert Gas (MIG)(carbon steel)	3	0.84	0.0055	0.0005			0.014	0.001	0	0		0.001
Stick (E7018 electrode)	1	0.025	0.0211	0.0009			0.001	2.25E-05	0	0		2.25E-05
Tungsten Inert Gas (TIG)(carbon steel)	1	0.0005	0.0055	0.0005			2.75E-06	2.50E-07	0	0		2.50E-07
Oxyacetylene (carbon steel)	1	0.0005	0.0055	0.0005			2.75E-06	2.50E-07	0	0		2.50E-07
PROCESS	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10 = PM2.5	Mn	Ni	Cr	
FLAME CUTTING												
Oxyacetylene	1	0.5	8	0.1622	0.0005	0.0001	0.0003	0.039	1.95E-05	3.89E-09	1.46E-13	1.95E-05
EMISSION TOTALS							EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
							PM = PM10 = PM2.5	Mn	Ni	Cr		
Potential Emissions lbs/hr							0.05	1.30E-03	3.89E-09	1.46E-13	1.30E-03	
Potential Emissions lbs/day							1.28	0.03	9.34E-08	3.50E-12	0.03	
Potential Emissions tons/year							0.23	0.01	1.71E-08	6.39E-13	0.01	

**METHODOLOGY**

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.  
 \*\*Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.  
 Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick  
 Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)  
 Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)  
 Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)  
 Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day  
 Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

**NOTES**

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Maximum electrode consumption per day**

PROCESS	Number of Stations	Maximum electrode consumption per station (lbs/hr)	Combined maximum electrode consumption (lbs/hr)	Combined maximum electrode consumption (lbs/day)
WELDING				
Metal Inert Gas (MIG)(ER5154)	3	0.84	2.52	60.5
Stick (E7018 electrode)	1	0.025	0.025	0.6
Tungsten Inert Gas (TIG) (carbon steel)	1	0.0005	0.0005	0.012
Oxyacetylene (carbon steel)	1	0.0005	0.0005	0.012
Total			<b>2.5</b>	<b>61.1</b>

**Methodology**

Combined maximum electrode consumption (lbs/hr) = Number of Stations \* Maximum electrode consumption per station (lb/hr)  
 Combined maximum electrode consumption (lbs/day) = Combined maximum electrode consumption (lbs/hr) \* 24 hrs/day

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Process and Space Heaters**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

Unit ID	Capacity
PC-1	1.60
FC-1	2.75
SC-1	0.35
CO	0.35
EU-1b	2.80
H-1	2.76
<b>Total</b>	<b>10.61</b>

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
<b>10.61</b>	<b>92.98</b>

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	5.7	0.6	100.0	5.5	84.0
					**see below		
Potential Emission in tons/yr	0.088	0.353	0.265	0.028	4.65	0.256	3.91

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 emission factor is condensable PM2.5 only.  
\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.763E-05	5.579E-05	3.487E-03	8.368E-02	1.581E-04

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.324E-05	5.114E-05	6.509E-05	1.767E-05	9.763E-05

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

<b>Total HAPs</b>	<b>0.088</b>	<b>tons/year</b>
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**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

**Appendix A: Emissions Calculations  
Dust Collector Emissions Calculation Sheet  
from the Paper Trimming Operation**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

**Description of process:**

Phenolic impregnated paper is trimmed to size prior to curing. Scrap paper and dust from trimming is collected and bailed. Most of the material is large and is removed by a cyclone. The exhaust from the cyclone is directed into a fabric filter for additional cleaning.

**Emission Unit Characteristics: Paper Trimming Operation**

Emission Unit ID: EU-1a  
Dust Collection Device ID(s): C-1 & DC-2  
Type(s) of dust collection device(s): Cyclone exhausting to Fabric Filter  
C-1 Collection Eff. (%): 85 (Assumed)  
DC-2 Collection Eff. (%): 99.9 (Manufacturer data)

**Emission Factor Determination:**

Data Collected

Actual duration of test period (hrs):	700	(6 months)
Actual production rate (lbs paper/hr):	131	(from PCC Flo Pak Oven Process Information)
Actual production during test period (lbs paper):	91700	(700hrs x 131lbs/hr)
Actual Dust collected (lbs):	50	

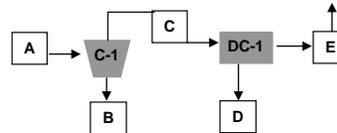
Assumptions

% of Dust collected that is PM	100*
% of Dust collected that is PM10	100*

Calculations

C-1	PM/PM10 Incoming (lbs/hr):	0.4767	A
	PM/PM10 Collected (lbs/hr):	0.4052	B
	PM/PM10 Emissions (lbs/hr):	0.0715	C
↓			
DC-2	PM/PM10 Incoming (lbs/hr):	0.0715	C
	PM/PM10 Collected (lbs/hr):	0.0714	D
	PM/PM10 Emissions (lbs/hr):	0.0000714	E
PM/PM10 Emission Factor (lbs/lb paper):		0.0036	
System Collection Efficiency (%):		99.985%	

SYSTEM DIAGRAM



The roll of paper is pleated as it enters the curing oven. The size of the pleat affects the rate at which the roll is processed. The 1-1/2" pleat is processed the fastest, 500 lbs in 3 hours. To calculate the PTE, we will assume that only the 1-1/2" pleated paper is produced.

Potential operating time (hours/yr):	8760
Maximum paper processed (lbs):	500
Hours of processing (hrs):	3
Max Production Rate (lbs paper/hr):	167

POTENTIAL EMISSIONS

Pollutant	Max Production Rate (lbs paper/hr)	Emission Factor (lbs/lb paper)	PM/PM10/PM2.5 Emissions (lbs/hr)	PM/PM10/PM2.5 Emissions (tons/yr)	Control Efficiency (%)	Controlled Emissions (tons/yr)
PM	167	0.0036	0.61	<b>2.66</b>	99.985%	<b>0.0004</b>
PM10**	167	0.0036	0.61	<b>2.66</b>	99.985%	<b>0.0004</b>

**Methodology:**

Actual production during test period (lbs paper) = Actual duration of test period (hrs) / Actual production rate (lbs paper/hr)  
 PM/PM10/PM2.5 Emissions (lbs/hr) = Max Production Rate (lbs paper/hr) \* Emission Factor (lbs/lb paper)  
 PM/PM10/PM2.5 Emissions (tons/yr) = Emission Factor (lbs/lb paper) \* PM/PM10/PM2.5 Emissions (lbs/hr)  
 Controlled Emissions (tons/yr) = PM/PM10/PM2.5 Emissions (tons/yr) \* (1- Control Efficiency (%))

**Notes:**

\* Estimated value based on best available information.  
 \*\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Paper Trimming Operation (EU-1a)	167	0.083	<b>0.78</b>	3.40

**Methodology:**

Allowable Emissions (E) (lb/hr) = 4.10(Process Weight Rate)<sup>0.67</sup>  
 Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)\*8760)/2000

**Appendix A: Emissions Calculations  
Dust Collector Emissions Calculation Sheet  
from the Roving Reclamation Operation**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

## Description of process:

Tube filters that fail inspection are processed to reclaim the roving. The process consists of three units, a cutter, a chopper and an opener, that emit a small amount of PM/PM10.

Emission Unit Characteristics: **Roving Cutter**

Emission Unit ID: RR-1  
Dust Collector ID: DC-4  
Type of dust collector: Fabric filter bag  
DC-4 Collection Eff. (%):99 (assumed)

## Emission Factor Determination:

The amount of material collected in the filter bags during a known period of time and production was weighed. The collected material had the same appearance as cuttings of yarn. Therefore, it was assumed that only 1% of the material collected maybe smaller than 100 microns.

Data Collected

Maximum Roving Throughput (lbs/hr):	375
Actual duration of period (hrs):	25
Actual dust collected (lbs):	15

Assumptions

% of Dust collected that is PM	100%*
% of Dust collected that is PM10	100%*

## POTENTIAL EMISSIONS

Pollutant	PM/PM10/PM2.5 Emissions (lbs/hr)	Hours of operation (hrs/yr)	PM/PM10/PM2.5 Emissions (tons/yr)	Control Efficiency (%)	Controlled Emissions (tons/yr)
PM	0.60	8760	<b>2.63</b>	99	<b>0.026</b>
PM10**	0.60	8760	<b>2.63</b>	99	<b>0.026</b>

## 326 IAC 6-3-2(e) Allowable Rate of Emissions:

Unit ID	Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Roving Cutter (RR-1)	375	0.188	<b>1.34</b>	5.85

## Methodology:

PM/PM10/PM2.5 Emissions (lbs/hr) = Actual dust collected (lbs) / Actual duration of period (hrs)  
PM/PM10/PM2.5 Emissions (tons/yr) = Emissions (lbs/hr) \* Hours of Operation (hrs/yr)  
Controlled Emissions (tons/yr) = PM/PM10/PM2.5 Emissions (tons/yr) \* (1- Control Efficiency (%))  
Allowable Emissions (E) (lb/hr) = 4.10(Process Weight Rate)<sup>0.67</sup>  
Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)\*8760)/2000

## NOTES:

\* Estimated value based on best available information.

\*\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Appendix A: Emissions Calculations  
Dust Collector Emissions Calculation Sheet  
from the Roving Cutter, Chopper and Opener.**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**Renewal No.:** 123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

## Description of process:

Tube filters that fail inspection are processed to reclaim the roving. The process consists of three units, a cutter, a chopper and an opener, that emit a small amount of PM/PM10.

Emission Unit Characteristics: **Roving Chopper**

Emission Unit ID: RR-2  
Dust Collector ID: DC-5  
Type of dust collector: Fabric filter bag  
DC-5 Collection Eff. (%): 99 (assumed)

## Emission Factor Determination:

The amount of material collected in the filter bags during a known period of time and production was weighed. The collected material had the same appearance as pillow filling. It was assumed that 10% of the material collected may be smaller than 100 microns.

Data Collected

Maximum Roving Throughput (lbs/hr):	375
Actual duration of period (hrs):	25
Actual dust collected (lbs):	15

Assumptions

% of Dust collected that is PM	100%*
% of Dust collected that is PM10	100%*

## POTENTIAL EMISSIONS

Pollutant	PM/PM10/PM2.5 Emissions (lbs/hr)	Hours of operation (hrs/yr)	PM/PM10/PM2.5 Emissions (tons/yr)	Control Efficiency (%)	Controlled Emissions (tons/yr)
PM	0.60	8760	<b>2.63</b>	99	<b>0.026</b>
PM10**	0.60	8760	<b>2.63</b>	99	<b>0.026</b>

## 326 IAC 6-3-2(e) Allowable Rate of Emissions:

Unit ID	Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Roving Chopper (RR-2)	375	0.188	<b>1.34</b>	5.85

## Methodology:

PM/PM10/PM2.5 Emissions (lbs/hr) = Actual dust collected (lbs) / Actual duration of period (hrs)  
PM/PM10/PM2.5 Emissions (tons/yr) = Emissions (lbs/hr) \* Hours of Operation (hrs/yr)  
Controlled Emissions (tons/yr) = PM/PM10/PM2.5 Emissions (tons/yr) \* (1- Control Efficiency (%))  
Allowable Emissions (E) (lb/hr) = 4.10(Process Weight Rate)<sup>0.67</sup>  
Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)\*8760)/2000

## NOTES:

\* Estimated value based on best available information.

\*\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Appendix A: Emissions Calculations  
Dust Collector Emissions Calculation Sheet  
from the Roving Cutter, Chopper and Opener.**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**Renewal No.:** 123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

## Description of process:

Tube filters that fail inspection are processed to reclaim the roving. The process consists of three units, a cutter, a chopper and an opener, that emit a small amount of PM/PM10.

Emission Unit Characteristics: **Roving Opener**

Emission Unit ID: RR-3  
Dust Collector ID: DC-6  
Type of dust collector: Fabric filter bag  
DC-6 Collection Eff. (%):99 (assumed)

## Emission Factor Determination:

The amount of material collected in the filter bags during a known period of time and production was weighed. The collected material had the same appearance as pillow tilling. It was assumed that 50% of the material collected may be smaller than 100 microns.

Data Collected

Maximum Roving Throughput (lbs/hr):	375
Actual duration of period (hrs):	25
Actual dust collected (lbs):	15

Assumptions

% of Dust collected that is PM	50%*
% of Dust collected that is PM10	50%*

## POTENTIAL EMISSIONS

Pollutant	PM/PM10/PM2.5 Emissions (lbs/hr)	Hours of operation (hrs/yr)	PM/PM10/PM2.5 Emissions (tons/yr)	Control Efficiency (%)	Controlled Emissions (tons/yr)
PM	0.60	8760	<b>2.63</b>	99	<b>0.026</b>
PM10**	0.60	8760	<b>2.63</b>	99	<b>0.026</b>

## 326 IAC 6-3-2(e) Allowable Rate of Emissions:

Unit ID	Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Roving Opener (RR-3)	375	0.188	<b>1.34</b>	5.85

## Methodology:

PM/PM10/PM2.5 Emissions (lbs/hr) = Actual dust collected (lbs) / Actual duration of period (hrs)  
PM/PM10/PM2.5 Emissions (tons/yr) = Emissions (lbs/hr) \* Hours of Operation (hrs/yr)  
Controlled Emissions (tons/yr) = PM/PM10/PM2.5 Emissions (tons/yr) \* (1- Control Efficiency (%))  
Allowable Emissions (E) (lb/hr) = 4.10(Process Weight Rate)<sup>0.67</sup>  
Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)\*8760)/2000

## NOTES:

\* Estimated value based on best available information.

\*\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Appendix A: Emissions Calculations  
PSD Significant Emission Rate Modeling Test**

**Company Name:** Parker Hannifin Corporation,  
Process Filtration Division  
**Address City IN Zip:** 2002 Main St, Tell City, IN 47586  
**FESOP Renewal No.:** F123-26509-00015  
**Reviewer:** Hannah L. Desrosiers  
**Date Submitted:** May 8, 2008

PCC Flo Pak Process (EU-1c)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Needled Media Process (EU-4)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	5.91	0	0	0	0
Controlled Emissions Rate (lbs/hr)	1.35	0	0.00	0.00	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Carbon Cartridge End Cap Adhesion (EU-2)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Welding and Thermal Cutting (W-1)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.23	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0.05	0	0.00	0.00	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Flo Pak Plastisol (EU-5)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.00	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0.00	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Natural Gas Combustion	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.35	0.03	4.65	3.91	2.32E-05
Controlled Emissions Rate (lbs/hr)	0.08	0.01	1.06	0.89	5.31E-06
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Pro Bond Process (R-1)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Roving Reclamation Operation (RR-1, RR-2 & RR-3)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.08	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0.02	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Cut and Pack Process (CP-1)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.02	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0.01	0	0.00	0.00	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No

Paper Trimming Operation (EU-1a)	PM10	SO2	Nox	Co	Pb
Controlled Emissions (Tons/yr)	0.00	0	0	0	0
Controlled Emissions Rate (lbs/hr)	0.00	0	0	0	0
<b>PSD Significant threshold</b>	<b>3.42</b>	<b>9.13</b>	<b>9.13</b>	<b>22.83</b>	<b>0.137</b>
Threshold exceeded?	No	No	No	No	No