15-00004

ALCOA FLEXIBLE PKG LLC/DOWNINGTOWN



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: December 28, 2001 Effective Date: July 6, 2005
Revision Date: July 6, 2005 Expiration Date: January 31, 2007

Revision Type: Transfer

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 15-00004

Federal Tax Id - Plant Code: 20-1902976-1

Owner Information

Name: ALCOA FLEXIBLE PKG LLC

Mailing Address: 520 LINCOLN AVE

DOWNINGTOWN, PA 19335-3032

Plant Information

Plant: ALCOA FLEXIBLE PKG LLC/DOWNINGTOWN

Location: 15 Chester County 15804 Downingtown Borough

SIC Code: 2754 Manufacturing - Commercial Printing, Gravure

Responsible Official

Name: JOHN KAY

Title:

Phone: (610) 873 - 5100

Permit Contact Person

Name: JOHN KAY

Title: PLANT MANAGER Phone: (610) 873 - 5100

Signaturel			

FRANCINE B CARLINI, SOUTHEAST REGION AIR PROGRAM MANAGER





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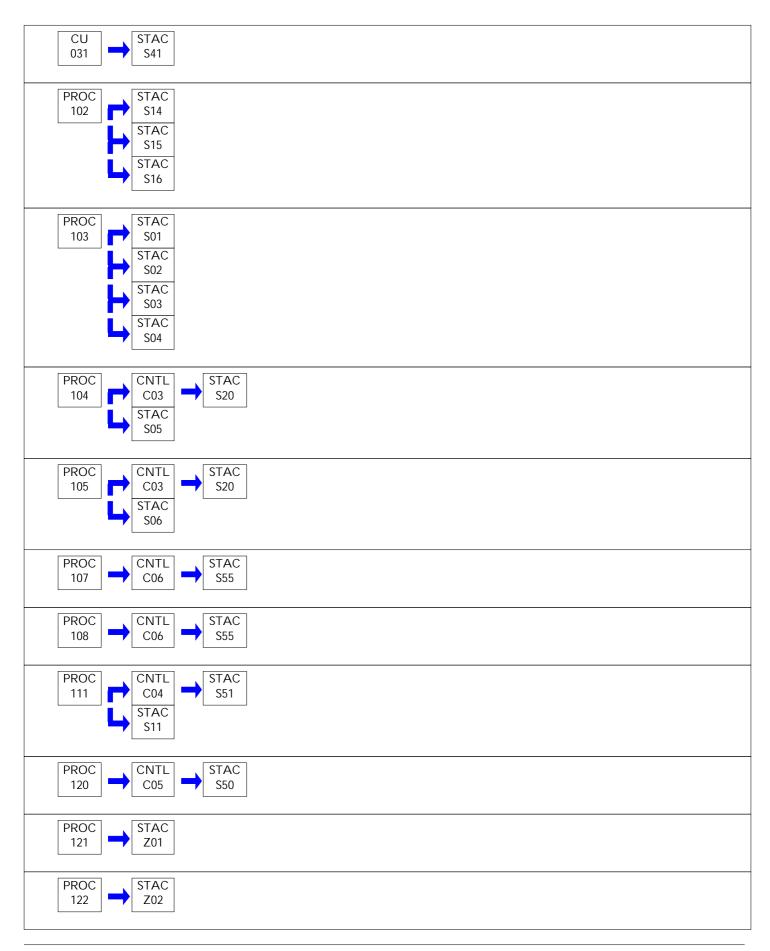


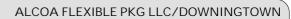
SECTION A. Site Inventory List

Source	e ID Source Name	Capacity/Throughput	Fuel/Material
031 TITUSVILLE BOILER		6.700 MMBTU/HR	
		77.10 CF/HR	Natural Gas
102	ROTO #2 [39" WIDE; 1,000 FT/MIN]	N/A	INK
		N/A	CLEANING SOLV.
103	ROTO #3 [39" WIDE; 1,000 FT/MIN]	N/A	INK
		N/A	CLEANING SOLV.
104	ROTO #4 [45" WIDE; 800 FT/MIN]	N/A	SOLV. BASED INK
		N/A	CLEANING SOLV.
105	ROTO #5 [38" WIDE; 1,000 FT/MIN]	N/A	SOLV. BASED INK
		N/A	CLEANING SOLVENT
107	ROTO #7 [16" WIDE; 1,000 FT/MIN]	N/A	SOLV/WATER BASED IN
		N/A	CLEANING SOLV.
108	ROTO #8 [21.25"WIDE; 1,000 FT/MIN]	N/A	SOLV. BASED INK
		N/A	CLAENING SOLV.
111	FLEXO #1 [38"WIDE; 580 FT/MIN]	N/A	SOLVENT IN INK
		N/A	SOLVENT
		N/A	NATURAL GAS
120	PARTS WASHER	N/A	SOLVENT
121	PLANT CLEANING OPERATIONS	N/A	SOLVENT
122	INK ROOM	N/A	SOLVENT IN INK
123	7 SEAMERS	N/A	VOC EMITTED
124	MISC. SOURCES	14//1	VOOLIVIITIED
C03	CATALYTIC OXIDIZER M&W 1	4.50 MCF/HR	NATURAL GAS
C04	PILLAR CATALYTIC OXIDIZER	6.70 MCF/HR	NATURAL GAS
C05	CONDENSER		
C06	CATALYTIC OXIDIZER M&W 2	6.10 MCF/HR	NATURAL GAS
S01	ROTO #3 STACK		
S02	ROTO #3 STACK		
S03	ROTO #3 STACK		
S04	ROTO #3 STACK		
S05	ROTO #4 STACK		
S06	ROTO #5 STACK		
S11	FLEXO #1 STACK		
S14	ROTO #2 STACK		
S15	ROTO #2 STACK		
S16	ROTO #2 STACK		
S20	M&W #1 STACK		
S41	TITUSVILLE BOILER STACK		
S50	PARTS WASHER STACK		
S51	PILLAR STACK		
S52	SEAMERS STACK		
S55	M&W #2 STACK		
Z01	PLANT CLEANING FUGITIVES		
Z02	INK ROOM FUGITIVES		
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PERMIT MAPS

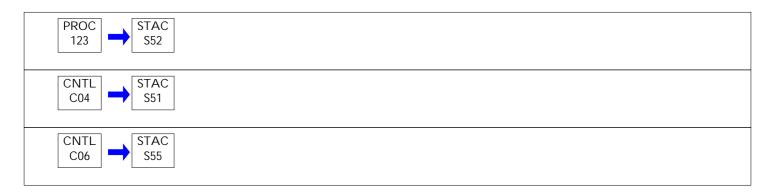
















#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

#003 [25 Pa. Code § 127.446(a) and (c)]

Permit Expiration

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#004 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

Permit Renewal

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#005 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
 - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.
- (b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.





#006 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

Inspection and Entry

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
 - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

Compliance Requirements

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
 - (1) Enforcement action
 - (2) Permit termination, revocation and reissuance or modification
 - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a 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.

#009 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to





determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#010 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

- (a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#011 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#012 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541.

#013 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

- (a) The permittee may make minor operating permit modifications (as defined in 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (b) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to an operational flexibility change authorized by 25 Pa. Code § 127.462.





#014 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

- (a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code § 127.450(a), according to procedures specified in § 127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.
- (b) Upon taking final action granting a request for an administrative permit amendment in accordance with § 127.450(c), the Department will allow coverage under 25 Pa. Code § 127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa. Code Article III, unless precluded by the Clean Air Act or the regulations thereunder.

#015 [25 Pa. Code § 127.512(b)]

Severability Clause

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#016 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

Fee Payment

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.
- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).
- (e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.
- (f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#017 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
 - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.



The Department may disapprove or condition de minimis emission increases at any time.

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.
 - (5) Laboratory equipment used exclusively for chemical or physical analysis.
 - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code §





127.516 (relating to permit shield) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.

- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#018 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#019 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#020 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

Submissions

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Air Enforcement Branch (3AP12)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other



certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#021 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

Sampling, Testing and Monitoring Procedures

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#022 [25 Pa. Code §§ 127.511 & Chapter 135]

Recordkeeping Requirements

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
 - (1) The date, place (as defined in the permit) and time of sampling or measurements.
 - (2) The dates the analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of the analyses.
 - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#023 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source.





The required reports shall be certified by a responsible official.

- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #020(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#024 [25 Pa. Code § 127.513]

Compliance Certification

- (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:
 - (1) The identification of each term or condition of the permit that is the basis of the certification.
 - (2) The compliance status.
 - (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
 - (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification should be postmarked or hand-delivered within thirty days of each anniversary date of the date of issuance to the Department and EPA in accordance with the submission requirements specified in Condition #020 of this section.

#025 [25 Pa. Code § 127.3]

Operational Flexibility

- (a) The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:
 - (1) Section 127.14 (relating to exemptions)
 - (2) Section 127.447 (relating to alternative operating scenarios)
 - (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
 - (4) Section 127.449 (relating to de minimis emission increases)
 - (5) Section 127.450 (relating to administrative operating permit amendments)
 - (6) Section 127.462 (relating to minor operating permit amendments)
 - (7) Subchapter H (relating to general plan approvals and operating permits)
- (b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa. Code § 127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

#026 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release



program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
 - (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
 - (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
- (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #24 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#027 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#028 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

Permit Shield

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
 - (1) The applicable requirements are included and are specifically identified in this permit.







- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
 - (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
 - (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department on minor or significant permit modifications, and operational flexibility changes shall be covered by the permit shield. Upon taking final action granting a request for an administrative permit amendment, the Department will allow coverage of the amendment by the permit shield in § 127.516 for administrative amendments which meet the relevant requirements of 25 Pa. Code Article III.
- (d) The permit shield authorized under § 127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.





I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §121.7] Prohibition of air pollution.

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (a) Construction or demolition of buildings or structures.
- (b) Grading, paving, and maintenance of roads and streets.
- (c) Use of roads and streets. Emissions from material in or on trucks, railroad cars, and other vehicular equipment are not considered as emissions from use of roads and streets.
- (d) Clearing of land.
- (e) Stockpiling of materials.
- (f) Sources, and classes of sources, other than those identified in
- (a) (e) above, for which the operator has obtained a determination from the Department, in accordance with 25 Pa. Code § 123.1(b), that fugitive emissions from the source, after appropriate controls, meet the following requirements:
- (1) The emissions are of minor significance with respect to causing air pollution; and
- (2) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Condition #002, of this Section, if such emissions are visible at the point the emissions pass outside the person§s property.

004 [25 Pa. Code §123.31]

Limitations

{MALODOR EMISSIONS}

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

005 [25 Pa. Code §123.41]

Limitations

{VISIBLE EMISSIONS}

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (b) Equal to or greater than 60% at any time.





006 [25 Pa. Code §123.42]

Exceptions

(VISIBLE EMISSION EXCEPTIONS)

The limitations of Condition #005, of this Section, shall not apply to a visible emission in either of the following instances:

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.
- (b) When the emission results from the sources specified in Condition #002, of this Section.

007 [25 Pa. Code §129.14]

Open burning operations

No person may permit the open burning of material in the Southeast Air Basin, except when the open burning results from:

- (a) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (b) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (c) A fire set solely for cooking food.
- (d) A fire set solely for recreational or ceremonial purposes.
- (e) A fire set for the prevention and control of disease or pests, when approved by the Department.

II. TESTING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in
- 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.

009 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.





010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

- (a). The permittee shall monitor the facility, once per operating day, for the following:
 - (1). Odors, which the Department may determine to be objectionable.
 - (2). Visible Emissions.
 - (3). Fugitive Particulate Matter.
- (b). All detectable fugitive particulate emissions, and/or objectionable odors, that originated on-site and cross the property line as well as visible emissions that originate on site shall:
 - (1). Be investigated.
 - (2). Be reported to the facility management, or individual(s) designated by the permittee.
 - (3). Be recorded in a permanent written log.
- (c). At the end of six months, upon the permittee§s request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly for the next six month period.
- (d). At the end of the second six month period, upon the permittee§s request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (e). The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification and the semi-annual report of monitoring and record keeping, complaints, monitoring results, and/or Department findings.

IV. RECORDKEEPING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

 $[Additional\ authority\ for\ this\ permit\ condition\ is\ also\ derived\ from$

25 Pa. Code § 127.511.]

The permittee shall maintain a record of all reports of fugitive emissions, visible emissions and malodors which deviate from the terms and conditions of this permit. The report shall contain, at a minimum, the following items:

- (a) Date, time, and location of the incident(s).
- (b) The cause of the event.
- (c) The corrective action taken to abate the deviation and prevent future occurrences.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Within sixty (60) days after permit issuance, the permittee shall submit, to the Department for approval, the proposed recordkeeping formats required in this Operating Permit.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code §§ 129.91-95 and 127.511]

The permittee shall maintain records of





- (a) the type of training provided to each operator, and
- (b) the hours of training provided.

V. REPORTING REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 127.511(c).]

The report of the deviations required by Condition #023(b), of Section B, of this permit, shall be submitted to the Department, within six (6) months after final permit issuance, and, at a frequency of at least every six (6) months thereafter.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 127.511.]

- (a) The permittee shall, within two (2) hours, of becoming knowledgeable, of any occurrence, notify the Department, at (610) 832-6241, of any malfunction of the source(s) or associated air pollution control devices listed in Section A, of this permit, which results in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in this permit, or regulation contained in 25 Pa. Code Article III.
- (b) Malfunction(s) which occur at this Title V facility, and pose(s) an imminent danger to public health, safety, welfare and the environment, and would violate permit conditions if the source were to continue to operate after the malfunction, shall immediately be reported to the Department by telephone at the above number.
- (c) A written report shall be submitted to the Department within two (2) working days following the notification of the incident, and shall describe, at a minimum, the following:
- (1) The malfunction(s).
- (2) The emission(s).
- (3) The duration.
- (4) Any corrective action taken.

016 [25 Pa. Code §135.21]

Emission statements

The permittee shall submit by March 1, of each year, an annual emission statement for the preceding calendar year.

017 [25 Pa. Code §135.3]

Reporting

The permittee shall submit by March 1, of each year, an Air Information Management System (AIMS) inventory report for the preceding calendar year.

VI. WORK PRACTICE REQUIREMENTS.

018 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in Condition #002, of this Section, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(a) Use, where possible, of water or suitable chemicals, as approved by the Department, for control of dust in the demolition





of buildings or structures, construction operations, the grading of roads, or the clearing of land.

- (b) Application of asphalt, water, or other suitable chemicals, as approved by the Department, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) Paving and maintenance of roadways.
- (d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

The permittee shall immediately implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

- (a) The permittee may not modify any source identified in Section A, of this permit, prior to obtaining Department approval, except those modifications authorized by Condition #017(g), of Section B, of this permit.
- (b) If an unauthorized modification of any source(s) occurs at this facility, then this permit, as it pertains to the modified source(s), shall be suspended and the source(s) shall not be operated until the modification is authorized by the Department.

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall provide at least forty-one (41) hours of introductory training to new employees and twenty-five (25) hours per year of refresher training on the proper operation and maintenance of the source/control device.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VIII. COMPLIANCE CERTIFICATION.

The permittee shall submit on or before 01/01/2003 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #24 of section B of this permit, and annually thereafter.

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

*** Permit Shield In Fffect **

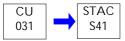




Source ID: 031 Source Name: TITUSVILLE BOILER

Source Capacity/Throughput: 6.700 MMBTU/HR

77.10 CF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.11]

Combustion units

No person may permit the emission into the outdoor atmosphere of particulate matter for this source at any time, in excess of 0.4 pounds per million Btu of heat input.

002 [25 Pa. Code §123.22]

Combustion units

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from this source at any time in excess of the rate of 1.2 pounds per million Btu of heat input.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall conduct daily monitoring, when in operation, of:

- (a) the amount of fuel used, and
- (b) the hours of operation.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall maintain daily records, when in operation, of:

- (a) the amount of fuel used, and
- (b) the hours of operation.



SECTION D.

15-00004

Source Level Requirements



V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall operate and maintain this source in accordance with the manufacturer's specifications to determine compliance with sulfur and particulate matter emission limit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***

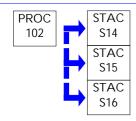




Source ID: 102 Source Name: ROTO #2 [39" WIDE; 1,000 FT/MIN]

Source Capacity/Throughput: N/A INK

N/A CLEANING SOLV.



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95 and § 127.512]

The Volatile organic Compound (VOC) emissions from the glue laminating station associated with Roto Press No.2 shall not exceed one (1) ton per year on a twelve (12) month rolling basis.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825]

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

Standards: Product and packaging rotogravure and wide-web flexographic printing.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either



M COURT

- (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
- (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.
- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,
- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of



paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.

- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:
- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if

or

- (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
- (B) The organic HAP emission rate based on solids applied, L, is $0.20~\mathrm{kg}$ organic HAP per kg solids applied or less, or
- $(C) \ the \ organic \ HAP \ emission \ rate \ based \ on \ material \ applied, \ S, \ is \ 0.04 \ kg \ organic \ HAP \ per \ kg \ material \ applied \ or \ less,$

(D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.

- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
 - (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP

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SECTION D. Source Level Requirements

emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.

- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR \S 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR \S 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:

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- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:
 - (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
 - (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
 - (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.



- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
- (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, Mi.
- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
- (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.
- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and

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- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B),





(f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:

- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.
- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.
- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

003 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]





- (a) The permittee shall use data from "Certified Product Data Sheets" (CPDS's) to calculate the emissions of the Volatile Organic Compounds from this source.
- (b) The permittee as an alternate to the CPDS's, may use Method 24 to determine the VOC content of the inks/coating(s) in order to update the REMARS calculation system.
- (c) The REMARS calculation system shall be used to calculate the emissions of VOCs from this source

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for thsi permit condition is also derived from 25 Pa.Code § 129.91-95]

The Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternate approved by the Department will be the standard for determining the properties of any coating used in this Alternate Standard.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.



- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.

- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
- (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.
 - (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
 - (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
 - (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative



conditions for the purpose of a performance test.

- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
- (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control device for the purpose of meeting the requirements of 40 CFR § 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:
- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
- (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95 and § 127.512]

The permittee shall monitor the glue laminating station when in operation.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.



- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.
- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in °C or ±1°C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR § 63.9(h) of the General Provisions, a plan that





- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.

IV. RECORDKEEPING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall maintain records of an updated listings of the types and compositions of the coatings and formulations and thinners used in the sources listed in Condition #001 of this Section.
- (b) The permittee shall submit the listings in paragraph (a) to the Department upon request.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code \S 129.91-95]

The permittee shall maintain records of the "Certified Product Data Sheets" (CPDS's) or data from any alternate Department approved methods.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95 and § 127.512]

The permittee shall calculate and record the VOC emissions of the glue laminating station monthly.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829]

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

Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR § 63.10(b)(1):
- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP





usage, volatile matter usage, and solids usage that support data that the source is required to report.

- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

013 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830] Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.





- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.
 - (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).

VI. WORK PRACTICE REQUIREMENTS.

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.





[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***

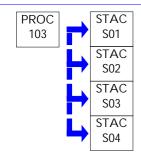




Source ID: 103 Source Name: ROTO #3 [39" WIDE; 1,000 FT/MIN]

Source Capacity/Throughput: N/A INK

N/A CLEANING SOLV.



I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825] Subpart KK--National Emission Standards for the Printing and Publishing Industry Standards: Product and packaging rotogravure and wide-web flexographic printing. [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.





- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,
- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.

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- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:
- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
 - (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less,
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.



- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:

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- (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
- (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
 - (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material

applied each month, Mi.

- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
- (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.
- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
 - (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that



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oxidizer either

- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings,





varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.

- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.
- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

(a) The permittee shall use data from "Certified Product Data Sheets" (CPDS's) to calculate the emissions of the Volatile Organic Compounds from this source.





- (b) The permittee as an alternate to the CPDS's, may use Method 24 to determine the VOC content of the inks/coating(s) in order to update the REMARS calculation system.
- (c) The REMARS calculation system shall be used to calculate the emissions of VOCs from this source

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for thsi permit condition is also derived from 25 Pa.Code § 129.91-95]

The Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternate approved by the Department will be the standard for determining the properties of any coating used in this Alternate Standard.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

- (a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if



- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination

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may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.

- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
- (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.
 - (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
 - (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
 - (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
 - (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing



compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.

- (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control device for the purpose of meeting the requirements of 40 CFR § 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:
- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
- (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.

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- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.
- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in °C or ±1°C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR § 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and



- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall maintain records of an updated listings of the types and compositions of the coatings and formulations and thinners used in the sources listed in Condition #001 of this Section.
- (b) The permittee shall submit the listings in paragraph (a) to the Department upon request.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain records of the "Certified Product Data Sheets" (CPDS's) or data from any alternate Department approved methods.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR § 63.10(b)(1):
- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.



- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

010 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830] Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.



- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the sitespecific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.
 - (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).

VI. WORK PRACTICE REQUIREMENTS.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

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SECTION D. Source Level Requirements

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

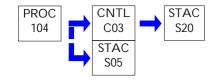
*** Permit Shield in Effect. ***





Source ID: 104 Source Name: ROTO #4 [45" WIDE; 800 FT/MIN]

Source Capacity/Throughput: N/A SOLV. BASED INK N/A CLEANING SOLV.



I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825] Subpart KK--National Emission Standards for the Printing and Publishing Industry Standards: Product and packaging rotogravure and wide-web flexographic printing. [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.
- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,



- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:

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- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
 - (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by

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SECTION D. Source Level Requirements

determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.

- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:
 - (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
 - (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
 - (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.

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- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
- (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, Mi.
- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
 - (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing

material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.

- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
 - (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture

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system have one or more never-controlled or intermittently-controllable work stations.

- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.
- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.





- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR \S 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR \S 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall use data from "Certified Product Data Sheets" (CPDS's) to calculate the emissions of the Volatile Organic Compounds from this source.
- (b) The permittee as an alternate to the CPDS's, may use Method 24 to determine the VOC content of the inks/coating(s) in order to update the REMARS calculation system.
- (c) The REMARS calculation system shall be used to calculate the emissions of VOCs from this source

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for thsi permit condition is also derived from

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25 Pa.Code § 129.91-95]

The Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternate approved by the Department will be the standard for determining the properties of any coating used in this Alternate Standard.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

- (a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).

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- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data

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and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
- (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.
 - (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
 - (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
 - (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
 - (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control





device for the purpose of meeting the requirements of 40 CFR \S 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:

- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
- (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.



- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR \S 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.



IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall maintain records of an updated listings of the types and compositions of the coatings and formulations and thinners used in the sources listed in Condition #001 of this Section.
- (b) The permittee shall submit the listings in paragraph (a) to the Department upon request.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain records of the "Certified Product Data Sheets" (CPDS's) or data from any alternate Department approved methods.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR § 63.10(b)(1):
- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.



- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830] Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.





- (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).

VI. WORK PRACTICE REQUIREMENTS.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
 - (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP





content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

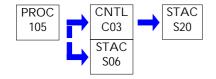
*** Permit Shield in Effect. ***





Source ID: 105 Source Name: ROTO #5 [38" WIDE; 1,000 FT/MIN]

Source Capacity/Throughput: N/A SOLV. BASED INK
N/A CLEANING SOLVENT



I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825] Subpart KK--National Emission Standards for the Printing and Publishing Industry Standards: Product and packaging rotogravure and wide-web flexographic printing. [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.
- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,

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- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:

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- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
 - (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by

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SECTION D. Source Level Requirements

determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.

- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:
 - (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
 - (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
 - (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.



- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
- (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, Mi.
- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
 - (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing



material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.

- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
 - (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture

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system have one or more never-controlled or intermittently-controllable work stations.

- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.
- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.





- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall use data from "Certified Product Data Sheets" (CPDS's) to calculate the emissions of the Volatile Organic Compounds from this source.
- (b) The permittee as an alternate to the CPDS's, may use Method 24 to determine the VOC content of the inks/coating(s) in order to update the REMARS calculation system.
- (c) The REMARS calculation system shall be used to calculate the emissions of VOCs from this source

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for thsi permit condition is also derived from



25 Pa.Code § 129.91-95]

The Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternate approved by the Department will be the standard for determining the properties of any coating used in this Alternate Standard.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

- (a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).

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- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data

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and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
- (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.
 - (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
 - (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
 - (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
 - (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control



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device for the purpose of meeting the requirements of 40 CFR \S 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:

- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
- (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.



- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR \S 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall maintain records of an updated listings of the types and compositions of the coatings and formulations and thinners used in the sources listed in Condition #001 of this Section.
- (b) The permittee shall submit the listings in paragraph (a) to the Department upon request.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain records of the "Certified Product Data Sheets" (CPDS's) or data from any alternate Department approved methods.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR § 63.10(b)(1):
- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.



- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830] Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.



- (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).

VI. WORK PRACTICE REQUIREMENTS.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
 - (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP





content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***





Source ID: 107 Source Name: ROTO #7 [16" WIDE; 1,000 FT/MIN]

Source Capacity/Throughput: N/A SOLV/WATER BASED INK

N/A CLEANING SOLV.



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.92]

The Volatile Organic Compound (VOC) emissions of the operations of Roto Press #7 and #8 including clean-up operations shall in total not exceed more than 47.6 tons per year on a 12 month rolling basis.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825]

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

Standards: Product and packaging rotogravure and wide-web flexographic printing.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.



- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,
- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.



- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:
- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
 - (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less,
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.

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- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:

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- (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
- (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
 - (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material

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applied each month, Mi.

- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
- (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.
- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
 - (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that



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oxidizer either

- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings,



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varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.

- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.
- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through



- (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined

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SECTION D. Source Level Requirements

for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
 - (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling





locations.

- (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
- (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
- (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
- (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control device for the purpose of meeting the requirements of 40 CFR § 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:
- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
 - (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture



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efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.
- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.

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SECTION D. Source Level Requirements

- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR \S 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.

IV. RECORDKEEPING REQUIREMENTS.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR §





63.10(b)(1):

- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code \S 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830]

Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

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- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.
 - (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).





VI. WORK PRACTICE REQUIREMENTS.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Fffect. ***





Source ID: 108 Source Name: ROTO #8 [21.25"WIDE; 1,000 FT/MIN]

Source Capacity/Throughput: N/A SOLV. BASED INK N/A CLAENING SOLV.



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.92]

The Volatile Organic Compound (VOC) emissions of the operations of Roto Press #7 and #8 including clean-up operations shall in total not exceed more than 47.6 tons per year on a 12 month rolling basis.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825]

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

Standards: Product and packaging rotogravure and wide-web flexographic printing.

 $[Additional\ authority\ for\ this\ permit\ condition\ is\ also\ derived\ from$

25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.

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- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
- (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of paragraph (b)(3)(i)(A) of this condition,
- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.



- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:
 - (1) Perform a liquid-liquid material balance for each and every month as follows:
- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
 - (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less,
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.

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- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:

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- (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
- (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
 - (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material

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SECTION D. Source Level Requirements

applied each month, Mi.

- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
- (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.
- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
 - (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that

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SECTION D. Source Level Requirements

oxidizer either

- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings,



varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.

- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.
- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through

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- (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined

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for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
 - (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling

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locations.

- (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
- (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
- (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
- (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control device for the purpose of meeting the requirements of 40 CFR § 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:
- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
 - (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture



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efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.
- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.

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- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR \S 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.

IV. RECORDKEEPING REQUIREMENTS.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR §





63.10(b)(1):

- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code \S 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830]

Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

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- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.
 - (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).





VI. WORK PRACTICE REQUIREMENTS.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***

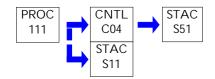


Source ID: 111 Source Name: FLEXO #1 [38"WIDE; 580 FT/MIN]

> Source Capacity/Throughput: N/A SOLVENT IN INK

> > N/A SOLVENT

N/A **NATURAL GAS**



RESTRICTIONS.

Emission Restriction(s).

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.825] Subpart KK--National Emission Standards for the Printing and Publishing Industry Standards: Product and packaging rotogravure and wide-web flexographic printing. [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) Each owner or operator of any product and packaging rotogravure or wide-web flexographic printing affected source that is subject to the requirements of this subpart shall comply with these requirements on and after the compliance dates as specified in 40 CFR § 63.826 of this subpart.
- (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. The owner or operator of each product and packaging rotogravure or wide-web flexographic printing affected source shall demonstrate compliance with this standard by following one of the procedures in paragraphs (b)(1) through (b)(10) of this condition:
- (1) Demonstrate that each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied during the month contains no more than 0.04 weight-fraction organic HAP, on an as-purchased basis, as determined in accordance with 40 CFR § 63.827(b)(2).
- (2) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied during the month contains no more than 0.04 weight-fraction organic HAP, on a monthly average as-applied basis as determined in accordance with paragraphs (b)(2)(i)-(ii) of this condition. The owner or operator shall calculate the as-applied HAP content of materials which are reduced, thinned, or diluted prior to application, as follows:
- (i) Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, diluent, reducer, thinner, and other material applied on an as-purchased basis in accordance with 40 CFR § 63.827(b)(2).
- (ii) Calculate the monthly average as-applied organic HAP content, Cahi of each ink, coating, varnish, adhesive, primer, and other solids-containing material using Equation 3, Section H, Appendix 1.
 - (3) (i) Demonstrate that each ink, coating, varnish, adhesive, primer, and other solids-containing material applied, either
 - (A) Contains no more than 0.04 weight-fraction organic HAP on a monthly average as-applied basis, or
 - (B) Contains no more than 0.20 kg of organic HAP per kg of solids applied, on a monthly average as-applied basis.
- (ii) The owner or operator may demonstrate compliance in accordance with paragraphs (b)(3)(ii) (A)-(C) of this condition.
 - (A) Use the procedures of paragraph (b)(2) of this condition to determine which materials meet the requirements of

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paragraph (b)(3)(i)(A) of this condition,

- (B) Determine the as-applied solids content following the procedure in 40 CFR § 63.827(c)(2) of all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition. The owner or operator may calculate the monthly average as-applied solids content of materials which are reduced, thinned, or diluted prior to application, using Equation 4, Section H, Appendix 1 and
- (C) Calculate the as-applied organic HAP to solids ratio, Hsi, for all materials which do not meet the requirements of paragraph (b)(3)(i)(A) of this condition, using Equation 5, Section H, Appendix 1.
- (4) Demonstrate that the monthly average as-applied organic HAP content, HL, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6, Section H, Appendix 1.
- (5) Demonstrate that the monthly average as-applied organic HAP content on the basis of solids applied, Hs, is less than 0.20 kg HAP per kg solids applied as determined by Equation 7, Section H, Appendix 1.
- (6) Demonstrate that the total monthly organic HAP applied, H, as determined by Equation 8, Section H, Appendix 1, is less than the calculated equivalent allowable organic HAP, Ha, as determined by paragraph (e) of this condition.
- (7) Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent for each month. If the affected source operates more than one capture system or more than one control device, and has only always-controlled work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of either paragraph (f) or (h) of this condition. If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance in accordance with the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (8) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.20 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (9) Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg material applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (10) Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (e) of this condition. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then the owner or operator shall demonstrate compliance in accordance with the provisions of paragraph (f) of this condition. Otherwise, the owner or operator shall demonstrate compliance following the procedure in paragraph (c) of this condition when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (d) of this condition when emissions are controlled by an oxidizer.
- (c) To demonstrate compliance with the overall organic HAP control efficiency requirement in 63.825(b)(7) or the organic HAP emissions limitation requirements in 63.825(b)(8)-(10), each owner or operator using a solvent recovery device to control emissions shall show compliance by following the procedures in either paragraph (c)(1) or (c)(2) of this condition:

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- (1) Perform a liquid-liquid material balance for each and every month as follows:
- (i) Measure the mass of each ink, coating, varnish, adhesive, primer, solvent and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (iii) Determine the volatile matter content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device shall be initially certified by the manufacturer to be accurate to within 2.0 percent.
 - (vi) Measure the amount of volatile matter recovered for the month.
 - (vii) Calculate the volatile matter collection and recovery efficiency, Rv, using Equation 9, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, using Equation 10, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 11, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 12, Section H, Appendix 1.
 - (xi) The affected source is in compliance if
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
 - (C) the organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less,
- (D) the organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency following the procedures in paragraphs (c)(2)(i) through (c)(2)(xi) of this condition:
- (i) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common control device during the month.
- (ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).

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- (iii) Install continuous emission monitors to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated and summed) at both the inlet to and the outlet from the control device, such that the percent control efficiency (E) of the control device can be calculated for each month.
- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (v) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with 40 CFR § 63.828(a)(5) whenever a product and packaging rotogravure or wide-web flexographic printing press is operated.
 - (vi) Determine the capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
- (vii) Calculate the overall organic HAP control efficiency, (R), achieved for each month using Equation 13, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, using Equation 15, Section H, Appendix 1.
- (x) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (xi) The affected source is in compliance if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The organic volatile matter collection and recovery efficiency, Rv, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (d) To demonstrate compliance with the overall organic HAP control efficiency requirement in 40 CFR § 63.825(b)(7) or the overall organic HAP emission rate limitation requirements in 40 CFR § 63.825(b)(8)-(10), each owner or operator using an oxidizer to control emissions shall show compliance by following the procedures in either paragraph (d)(1) or (d)(2) of this condition:
- (1) demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters following the procedures in paragraph (d)(1)(i) through (d)(1)(xi) of this condition:
 - (i) Determine the oxidizer destruction efficiency (E) using the procedure in 40 CFR § 63.827(d).
 - (ii) Determine the capture system capture efficiency (F) in accordance with 40 CFR § 63.827(e)-(f).
 - (iii) Calculate the overall organic HAP control efficiency, (R), achieved using Equation 13, Section H, Appendix 1.



- (iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied or emission of less than the calculated allowable organic HAP, measure the mass of each ink, coating, varnish, adhesive, primer, solvent, and other material applied on the press or group of presses controlled by a common solvent recovery device during the month.
- (v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(b)(2).
- (vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each ink, coating, varnish, adhesive, primer, solvent, and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, calculate the organic HAP emitted during the month, H, for each month using Equation 14, Section H, Appendix 1.
- (viii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 15, Section H, Appendix 1.
- (ix) If demonstrating compliance on the basis of organic HAP emission rate based on materials applied, calculate the organic HAP emission rate based on material applied, S, using Equation 16, Section H, Appendix 1.
- (x) Install, calibrate, operate and maintain the instrumentation necessary to measure continuously the site-specific operating parameters established in accordance with 40 CFR § 63.828(a)(4)-(5) whenever a product and packaging rotogravure or wide-web flexographic press is operating.
- (xi) The affected source is in compliance, if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR § 63.828(a)(4) for each three-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with 40 CFR § 63.828(a)(5) for each three hour period, and
 - (A) The overall organic HAP control efficiency, R, is 95 percent or greater, or
 - (B) The organic HAP emission rate based on solids applied, L, is 0.20 kg organic HAP per kg solids applied or less, or
- (C) The organic HAP emission rate based on material applied, S, is 0.04 kg organic HAP per kg material applied or less, or
- (D) The organic HAP emitted during the month, H, is less than the calculated allowable organic HAP, Ha, as determined using paragraph (e) of this condition.
- (2) Use continuous emission monitors, conduct an initial performance test of capture efficiency, and continuously monitor a site specific operating parameter to assure capture efficiency. Compliance shall be demonstrated in accordance with the requirements of paragraph (c)(2) of this condition.
- (e) Owners or operators may calculate the monthly allowable HAP emissions, Ha, for demonstrating compliance in accordance with paragraph (b)(6), (c)(1)(xi)(D), (c)(2)(xi)(D), or (d)(1)(xi)(D) of this condition as follows:
- (1) Determine the as-purchased mass of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, Mi.
- (2) Determine the as-purchased solids content of each ink, coating, varnish, adhesive, primer, and other solids-containing material applied each month, in accordance with 40 CFR § 63.827(c)(2), Csi.
 - (3) Determine the as-purchased mass fraction of each ink, coating, varnish, adhesive, primer, and other solids-containing

ECTION D.

Source Level Requirements



material which was applied at 20 weight-percent or greater solids content, on an as-applied basis, Gi.

- (4) Determine the total mass of each solvent, diluent, thinner, or reducer added to materials which were applied at less than 20 weight-percent solids content, on an as-applied basis, each month, MLj.
 - (5) Calculate the monthly allowable HAP emissions, Ha, using Equation 17, Section H, Appendix 1.
- (f) Owners or operators of product and packaging rotogravure or wide-web flexographic printing presses shall demonstrate compliance according to the procedures in paragraphs (f)(1) through (f)(7) of this condition if the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations.
- (1) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses for which the owner or operator chooses to comply by means of a liquid-liquid mass balance shall determine the organic HAP emissions for those presses controlled by that solvent recovery system either
- (i) in accordance with paragraphs (c)(1)(i)-(iii) and (c)(1)(v)-(viii) of this condition if the presses controlled by that solvent recovery system have only always-controlled work stations, or
- (ii) in accordance with paragraphs (c)(1)(ii)-(iii), (c)(1)(v)-(vi), and (g) of this condition if the presses controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.
- (2) The owner or operator of each solvent recovery system used to control one or more product and packaging rotogravure or wide-web flexographic presses, for which the owner or operator chooses to comply by means of an initial test of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that solvent recovery system, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture system efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that solvent recovery system either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (3) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters, shall
- (i) Monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(4) to assure control device efficiency, and
- (ii) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (iii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (d)(1)(i)-(v) and (d)(1)(vii) of this condition if the presses served by that capture system have only always-controlled work stations, or
 - (B) In accordance with paragraphs (d)(1)(i)-(iii), (d)(1)(v), and (g) of this condition if the presses served by that capture

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SECTION D. Source Level Requirements

system have one or more never-controlled or intermittently-controllable work stations.

- (4) The owner or operator of each oxidizer used to control emissions from one or more product and packaging rotogravure or wide-web flexographic presses choosing to demonstrate compliance through an initial capture efficiency test, continuous emission monitoring of the control device and continuous monitoring of a capture system operating parameter, shall
- (i) For each capture system delivering emissions to that oxidizer, monitor an operating parameter established in accordance with 40 CFR § 63.828(a)(5) to assure capture efficiency, and
- (ii) Determine the organic HAP emissions for those presses served by each capture system delivering emissions to that oxidizer either
- (A) In accordance with paragraphs (c)(2)(i)-(iii) and (c)(2)(v)-(viii) of this condition if the presses served by that capture system have only always-controlled work stations, or
- (B) In accordance with paragraphs (c)(2)(ii)-(iii), (c)(2)(v)-(vii), and (g) of this condition if the presses served by that capture system have one or more never-controlled or intermittently-controllable work stations.
- (5) The owner or operator of one or more uncontrolled product and packaging rotogravure or wide-web flexographic printing presses shall determine the organic HAP applied on those presses using Equation 8, Section H, Appendix 1. The organic HAP emitted from an uncontrolled press is equal to the organic HAP applied on that press.
- (6) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator shall determine the solids content of each ink, coating, varnish, adhesive, primer, solvent and other material applied during the month following the procedure in 40 CFR § 63.827(c)(2).
- (7) The owner or operator shall determine the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (f)(1), (f)(2)(ii), (f)(3)(iii), (f)(4)(ii), and (f)(5) of this condition. The affected source is in compliance for the month, if all operating parameters required to be monitored under paragraphs (f)(2)-(4) of this condition were maintained at the appropriate values, and
- (i) The total mass of organic HAP emitted by the affected source was not more than four percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners and other materials applied by the affected source, or
- (ii) The total mass of organic HAP emitted by the affected source was not more than 20 percent of the total mass of solids applied by the affected source, or
- (iii) The total mass of organic HAP emitted by the affected source was not more than the equivalent allowable organic HAP emissions for the affected source, Ha, calculated in accordance with paragraph (e) of this condition, or
- (iv) The total mass of organic HAP emitted by the affected source was not more than five percent of the total mass of organic HAP applied by the affected source. The total mass of organic HAP applied by the affected source in the month shall be determined by the owner or operator using Equation 8, Section H, Appendix 1.
- (g) Owners or operators determining organic HAP emissions from a press or group of presses having one or more never-controlled or intermittently-controllable work stations and using the procedures specified in paragraphs (f)(1)(ii), (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition shall for that press or group of presses:
- (1) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in bypass mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on never-controlled work stations during the month, MBi.
- (2) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in bypass mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on never-controlled work stations during the month, MBj.





- (3) Determine the sum of the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on intermittently-controllable work stations in controlled mode and the mass of all inks, coatings, varnishes, adhesives, primers, and other solids-containing materials which are applied on always-controlled work stations during the month, MBj.
- (4) Determine the sum of the mass of all solvents, reducers, thinners, and other diluents which are applied on intermittently-controllable work stations in controlled mode and the mass of all solvents, reducers, thinners, and other diluents which are applied on always-controlled work stations during the month, MCj.
- (5) For each press or group of presses for which the owner or operator uses the provisions of paragraph (f)(1)(ii) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 18, Section H, Appendix 1.
- (6) For each press or group of presses for which the owner or operator uses the provisions of paragraphs (f)(2)(ii)(B), (f)(3)(iii)(B), or (f)(4)(ii)(B) of this condition, the owner or operator shall calculate the organic HAP emitted during the month using Equation 19, Section H, Appendix 1.
- (h) If the affected source operates more than one capture system or more than one control device, and has no never-controlled work stations and no intermittently-controllable work stations, then the affected source is in compliance with the 95 percent overall organic HAP control efficiency requirement for the month if for each press or group of presses controlled by a common control device:
- (1) The volatile matter collection and recovery efficiency, Rv, as determined by paragraphs (c)(1)(i), (c)(1)(iii), and (c)(1)(v)-(vii) of this condition is equal to or greater than 95 percent, or
- (2) The overall organic HAP control efficiency as determined by paragraphs (c)(2)(iii) and (c)(2)(v)-(vii) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR § 63.828(a)(5) for each three hour period, or
- (3) The overall organic HAP control efficiency as determined by paragraphs (d)(1)(i)-(iii) and (d)(1)(x) of this condition for each press or group of presses served by that control device and a common capture system is equal to or greater than 95 percent, the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with 40 CFR \S 63.828(a)(4) for each three hour period, and the average capture system operating parameter value for each capture system serving that control device is greater than or less than (as appropriate) the operating parameter value established for that capture system in accordance with 40 CFR \S 63.828(a)(5) for each three hour period.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall use data from "Certified Product Data Sheets" (CPDS's) to calculate the emissions of the Volatile Organic Compounds from this source.
- (b) The permittee as an alternate to the CPDS's, may use Method 24 to determine the VOC content of the inks/coating(s) in order to update the REMARS calculation system.
- (c) The REMARS calculation system shall be used to calculate the emissions of VOCs from this source

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for thsi permit condition is also derived from



25 Pa.Code § 129.91-95]

The Method 24 which includes ASTM test methods D1475, D2369, D3792, D4017 or any alternate approved by the Department will be the standard for determining the properties of any coating used in this Alternate Standard.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.827] Subpart KK--National Emission Standards for the Printing and Publishing Industry Performance test methods.

- (a) An owner or operator using a control device to comply with the requirements of 40 CFR § 63.824-63.825 is not required to conduct an initial performance test to demonstrate compliance if one or more of the criteria in paragraphs (a)(1) through (a)(3) of this condition are met:
 - (1) A control device that is in operation prior to May 30, 1996, does not need to be tested if
- (i) It is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall HAP control efficiency can be calculated, and
- (ii) The continuous emission monitors are used to demonstrate continuous compliance in accordance with 40 CFR § 63.828, or
 - (2) The owner or operator has met the requirements of either 40 CFR § 63.7(e)(2)(iv) or 40 CFR § 63.7(h), or
- (3) The control device is a solvent recovery system and the owner or operator chooses to comply by means of a monthly liquid-liquid material balance.
- (b) Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.824 shall be conducted according to paragraph (b)(1) of this condition. Determination of the organic HAP content of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, diluents, and other materials for the purpose of meeting the requirements of 40 CFR § 63.825 shall be conducted according to paragraph (b)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the organic HAP weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, and other material used in a publication rotogravure affected source by following one of the procedures in paragraphs (b)(1)(i) through (b)(1)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(1) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(1)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Administrator, or by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR § 63.827(b)(1)(iii)(A).

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- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the organic HAP weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied by following one of the procedures in paragraphs (b)(2)(i) through (b)(2)(iii) of this condition:
- (i) The owner or operator may test the material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 311, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The recovery efficiency of the technique must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.
- (ii) The owner or operator may determine the volatile matter content of the material in accordance with 40 CFR § 63.827(c)(2) and use this value for the organic HAP content for all compliance purposes.
- (iii) The owner or operator may, except as noted in paragraph (b)(2)(iv) of this condition, rely on formulation data provided by the manufacturer of the material on a CPDS if
- (A) The manufacturer has included in the organic HAP content determination, all organic HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material, and
- (B) The manufacturer has determined the organic HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or, by an alternate method approved by the Administrator, or, by reliance on a CPDS from a raw material supplier prepared in accordance with 40 CFR 63.827(b)(2)(iii)(A).
- (iv) In the event of any inconsistency between the Method 311 of appendix A of 40 CFR part 63 test data and a facility's formulation data, that is, if the Method 311 test value is higher, the Method 311 test data shall govern, unless after consultation, an owner or operator demonstrates to the satisfaction of the enforcement authority that the formulation data are correct.
- (c) Determination by the owner or operator of the volatile matter content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used for the purpose of meeting the requirements of 40 CFR 63.824 shall be conducted according to paragraph (c)(1) of this condition. Determination by the owner or operator of the volatile matter and solids content of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials applied for the purpose of meeting the requirements of 40 CFR 63.825 shall be conducted according to paragraph (c)(2) of this condition.
- (1) Each owner or operator of a publication rotogravure facility shall determine the volatile matter weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used using Method 24A of 40 CFR part 60, appendix A. The Method 24A determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24A, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (2) Each owner or operator of a product and packaging rotogravure or wide-web flexographic printing facility shall determine the volatile matter and solids weight-fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator shall submit an alternative technique for determining their values for approval by the Administrator. The owner or operator may rely on formulation data, subject to the provisions of paragraph (c)(3) of this condition.
- (3) Owners or operators may determine the volatile matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data

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SECTION D. Source Level Requirements

and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, the owner or operator can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- (d) A performance test of a control device to determine destruction efficiency for the purpose of meeting the requirements of 40 CFR § 63.824-63.825 shall be conducted by the owner or operator in accordance with the following:
- (1) An initial performance test to establish the destruction efficiency of an oxidizer and the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet temperature for a catalytic oxidizer shall be conducted and the data reduced in accordance with the following reference methods and procedures:
- (i) Method 1 or 1A of 40 CFR part 60, appendix A is used for sample and velocity traverses to determine sampling locations.
 - (ii) Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A is used to determine gas volumetric flow rate.
 - (iii) Method 3 of 40 CFR part 60, appendix A is used for gas analysis to determine dry molecular weight.
 - (iv) Method 4 of 40 CFR part 60, appendix A is used to determine stack gas moisture.
- (v) Methods 2, 2A, 3, and 4 of 40 CFR part 60, appendix A shall be performed, as applicable, at least twice during each test period.
- (vi) Method 25 of 40 CFR part 60, Appendix A, shall be used to determine organic volatile matter concentration, except as provided in paragraphs (d)(1)(vi)(A)-(C) of this condition. The owner or operator shall submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under 40 CFR § 63.7(c). The owner or operator may use Method 25A of 40 CFR part 60, appendix A, if
- (A) An exhaust gas organic volatile matter concentration of 50 parts per million by volume (ppmv) or less is required to comply with the standards of 40 CFR § 63.824-63.825, or
- (B) The organic volatile matter concentration at the inlet to the control system and the required level of control are such to result in exhaust gas organic volatile matter concentrations of 50 ppmv or less, or
- (C) Because of the high efficiency of the control device, the anticipated organic volatile matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- (vii) Each performance test shall consist of three separate runs; each run conducted for at least one hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining organic volatile matter concentrations and mass flow rates, the average of results of all runs shall apply.
 - (viii) Organic volatile matter mass flow rates shall be determined using Equation 20, Section H, Appendix 1:
 - (ix) Emission control device efficiency shall be determined using Equation 21, Section H, Appendix 1:
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance test. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) For the purpose of determining the value of the oxidizer operating parameter that will demonstrate continuing compliance, the time-weighted average of the values recorded during the performance test shall be computed. For an oxidizer other than catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic oxidizer, the owner or operator shall establish as the operating parameter the minimum gas temperature upstream of the catalyst bed. These minimum temperatures are the operating parameter values that demonstrate continuing compliance with the requirements of 40 CFR § 63.824-63.825.
 - (e) A performance test to determine the capture efficiency of each capture system venting organic emissions to a control





device for the purpose of meeting the requirements of 40 CFR \S 63.824(b)(1)(ii), 63.824(b)(2), 63.825(c)(2), 63.825(d)(1)-(2), 63.825(f)(2)-(4), or 63.825(h)(2)-(3) shall be conducted by the owner or operator in accordance with the following:

- (1) For permanent total enclosures, capture efficiency shall be assumed as 100 percent. Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to 52.741 of 40 CFR part 52 of this chapter shall be used to confirm that an enclosure meets the requirements for permanent total enclosure.
- (2) For temporary total enclosures, the capture efficiency shall be determined according to the protocol specified in 52.741(a)(4)(iii)(B) of 40 CFR part 52 of this chapter. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.
- (f) As an alternative to the procedures specified in 40 CFR § 63.827(e) an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DQO) or the Lower Confidence Limit (LCL) approach as described in Appendix A of this subpart. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.92 and 127.511]

The permittee shall monitor the VOCs emissions of the following sources, using the computer based Reynolds Emission Monitoring and Reporting System "REMARS" or alternate system as approved by the Department.

Rotogravure Presses Number 2, 3,4,5,7 and 8, Flexographic presses Number 1

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.828] Subpart KK--National Emission Standards for the Printing and Publishing Industry Monitoring requirements.

- (a) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, the owner or operator shall monitor and inspect each control device required to comply with 40 CFR § 63.824-63.825 to ensure proper operation and maintenance by implementing the applicable requirements in paragraph (a)(1) through (a)(5) of this condition.
- (1) Owners or operators of product and packaging rotogravure or wide-web flexographic presses with intermittently-controllable work stations shall follow one of the procedures in paragraphs (a)(1)(i) through (a)(1)(iv) of this condition for each dryer associated with such a work station:
- (i) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the exhaust stream away from the control device to the atmosphere.
- (ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve or damper is maintained in the closed position and the exhaust stream is not diverted through the bypass line.
- (iii) Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position. The monitoring system shall be inspected at least once every month to ensure that it is functioning properly.



- (iv) Use an automatic shutdown system in which the press is stopped when flow is diverted away from the control device to any bypass line. The automatic system shall be inspected at least once every month to ensure that it is functioning properly.
- (2) Compliance monitoring shall be subject to the provisions of paragraphs (a)(2)(i) and (a)(2)(ii) of this condition, as applicable.
- (i) All continuous emission monitors shall comply with performance specifications (PS) 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of Appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.
- (ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications. The calibration of the chart recorder, data logger, or temperature indicator shall be verified every three months; or the chart recorder, data logger, or temperature indicator shall be replaced. The replacement shall be done either if the owner or operator chooses not to perform the calibration, or if the equipment cannot be calibrated properly.
- (3) An owner or operator complying with 40 CFR § 63.824-63.825 through continuous emission monitoring of a control device shall install, calibrate, operate, and maintain continuous emission monitors to measure the total organic volatile matter concentration at both the control device inlet and the outlet.
- (4) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of an oxidizer and demonstrating continuous compliance through monitoring of an oxidizer operating parameter shall:
- (i) For an oxidizer other than a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the combustion chamber at a location in the combustion zone.
- (ii) For a catalytic oxidizer, install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in °C or ± 1 °C, whichever is greater. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.
- (5) An owner or operator complying with the requirements of 40 CFR § 63.824-63.825 through the use of a control device and demonstrating continuous compliance by monitoring an operating parameter to ensure that the capture efficiency measured during the initial compliance test is maintained, shall:
- (i) Submit to the Administrator with the compliance status report required by 40 CFR \S 63.9(h) of the General Provisions, a plan that
- (A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained,
 - (B) Discusses why this parameter is appropriate for demonstrating ongoing compliance, and
 - (C) Identifies the specific monitoring procedures;
 - (ii) Set the operating parameter value, or range of values, that demonstrate compliance with 40 CFR § 63.824-63.825, and
- (iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.
- (b) Any excursion from the required operating parameters which are monitored in accordance with paragraphs (a)(4) and (a)(5) of this condition, unless otherwise excused, shall be considered a violation of the emission standard.



IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The permittee shall maintain records of an updated listings of the types and compositions of the coatings and formulations and thinners used in the sources listed in Condition #001 of this Section.
- (b) The permittee shall submit the listings in paragraph (a) to the Department upon request.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain records of the "Certified Product Data Sheets" (CPDS's) or data from any alternate Department approved methods.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.829] Subpart KK--National Emission Standards for the Printing and Publishing Industry Recordkeeping requirements.

- (a) The recordkeeping provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR part 63 subpart KK shall maintain the records specified in paragraphs (b)(1) through (b)(3) of this condition on a monthly basis in accordance with the requirements of 40 CFR § 63.10(b)(1):
- (1) Records specified in 40 CFR § 63.10(b)(2), of all measurements needed to demonstrate compliance with this standard, such as continuous emission monitor data, control device and capture system operating parameter data, material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report.
- (2) Records specified in 40 CFR § 63.10(b)(3) for each applicability determination performed by the owner or operator in accordance with the requirements of 40 CFR § 63.820(a) of this subpart, and
- (3) Records specified in 40 CFR § 63.10(c) for each continuous monitoring system operated by the owner or operator in accordance with the requirements of 40 CFR § 63.828(a) of this subpart.
- (c) Each owner or operator of an affected source subject to this subpart shall maintain records of all liquid-liquid material balances performed in accordance with the requirements of 40 CFR § 63.824-63.825 of this subpart. The records shall be maintained in accordance with the requirements of 40 CFR § 63.10(b).
- (d) The owner or operator of each facility which commits to the criteria of 40 CFR § 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- (e) The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(1) shall maintain records as required in paragraph (e)(1) of this condition. The owner or operator of each facility which meets the limits and criteria of 40 CFR § 63.821(b)(2) shall maintain records as required in paragraph (e)(2) of this condition. Owners or operators shall maintain these records for five years, and upon request, submit them to the Administrator.
- (1) For each facility which meets the criteria of 40 CFR § 63.821(b)(1), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.

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SECTION D. Source Level Requirements

- (2) For each facility which meets the criteria of 40 CFR § 63.821(b)(2), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.
- (f) The owner or operator choosing to exclude from an affected source, a product and packaging rotogravure or wide-web flexographic press which meets the limits and criteria of 40 CFR § 63.821(a)(2)(ii)(A) shall maintain the records specified in paragraphs (f)(1) and (f)(2) of this condition for five years and submit them to the Administrator upon request:
 - (1) The total mass of each material applied each month on the press, including all inboard and outboard stations, and
- (2) The total mass of each material applied each month on the press by product and packaging rotogravure or wide-web flexographic printing operations.

V. REPORTING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.92]

The permittee shall submit quarterly reports to the Department showing the emissions calculations generated by "REMARS", or alternate system as approved by the Department, for each month of operation and for each source listed in Condition #001.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.830] Subpart KK--National Emission Standards for the Printing and Publishing Industry Reporting requirements.

- (a) The reporting provisions of 40 CFR part 63 subpart A of this part that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR Part 63 subpart KK are listed in Table 1 of this subpart.
- (b) Each owner or operator of an affected source subject to 40 CFR Part 63 subpart KK shall submit the reports specified in paragraphs (b)(1) through (b)(6) of this condition. to the Administrator:
 - (1) An initial notification required in 40 CFR § 63.9(b).
- (i) Initial notifications for existing sources shall be submitted no later than one year before the compliance date specified in 40 CFR § 63.826(a).
 - (ii) Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR § 63.9(b).
- (iii) For the purpose of this subpart, a Title V or part 70 permit application may be used in lieu of the initial notification required under 40 CFR § 63.9(b), provided the same information is contained in the permit application as required by 40 CFR § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA.
 - (iv) Permit applications shall be submitted by the same due dates as those specified for the initial notifications.
- (2) A Notification of Performance Tests specified in 40 CFR § 63.7 and 63.9(e) of this part. This notification, and the site-specific test plan required under 40 CFR § 63.7(c)(2) shall identify the operating parameter to be monitored to ensure that the capture efficiency measured during the performance test is maintained. The operating parameter identified in the site-specific test plan shall be considered to be approved unless explicitly disapproved, or unless comments received from the Administrator require monitoring of an alternate parameter.
 - (3) A Notification of Compliance Status specified in 40 CFR 63.9(h) of this part.

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SECTION D. Source Level Requirements

- (4) Performance test reports specified in 40 CFR § 63.10(d)(2) of this part.
- (5) Start-up, shutdown, and malfunction reports specified in 40 CFR § 63.10(d)(5) of this part, except that the provisions in subpart A pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.
- (i) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in 40 CFR § 63.6(e)(3) of this part, the owner or operator shall state such information in the report. The start-up, shutdown, or malfunction report shall consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator.
- (ii) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (b)(6) of this condition.
- (6) A summary report specified in 40 CFR § 63.10(e)(3) of this part shall be submitted on a semi-annual basis (i.e., once every six-month period). In addition to a report of operating parameter exceedances as required by 40 CFR § 63.10(e)(3)(i), the summary report shall include, as applicable:
 - (i) Exceedances of the standards in 40 CFR § 63.824-63.825.
 - (ii) Exceedances of either of the criteria of 40 CFR § 63.820(a)(2).
 - (iii) Exceedances of the criterion of 40 CFR § 63.821(b)(1) and the criterion of 40 CFR § 63.821(b)(2) in the same month.
 - (iv) Exceedances of the criterion of 40 CFR § 63.821(a)(2)(ii)(A).

VI. WORK PRACTICE REQUIREMENTS.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.826] Subpart KK--National Emission Standards for the Printing and Publishing Industry Compliance dates.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is May 30, 1999.
- (b) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon start-up of the affected source, or May 30, 1996, whichever is later.
- (c) Affected sources which have undergone reconstruction are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed. Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.831] Subpart KK--National Emission Standards for the Printing and Publishing Industry Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under 40 CFR part 63 subpart E of this part, the authorities contained in paragraph (b) of this condition shall be retained by the Administrator and not transferred to a State.
 - (b) Authority which will not be delegated to States: 40 CFR § 63.827(b), approval of alternate test method for organic HAP





content determination; 40 CFR § 63.827(c), approval of alternate test method for volatile matter determination.

VII. ADDITIONAL REQUIREMENTS.

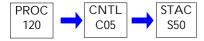
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***



Source ID: 120 Source Name: PARTS WASHER

Source Capacity/Throughput: N/A SOLVENT



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

The Volatile Organic Compound (VOC) emissions from the sources in the Washroom shall not exceed 11.8 tons per year on a twelve (12) month rolling basis.

Control Device Efficiencies Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95 and 127.512]

- (a) The Condensers attached to the washing machines must be equipped with a temperature gauge that indicates the inlet temperature of the water to the condensers.
- (b) The inlet temperature of the water to the condensers in paragraph (a) above shall not exceed 55 degrees Fahrenheit.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code §§ 127.512 and 129.91-95]

The permittee shall monitor the following:

- (a) the inlet temperature of the condensers daily,
- (b) the amount of solvents used for cleaning monthly, and
- (c) calculate and/or measure emission rate by methods approved by the Department.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code §§ 127.511 and 129.91-95]

The permittee shall keep records of the following:





- (a) the inlet temperature of the condensers, daily
- (b) the date and time when the temperature alarm sounded, and corrective action taken
- (c) the monthly usage of cleaning solvents
- (d) the calculations and/or measurements of emission rate.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 (h)]

The permittee shall operate and maintain the sources contained in the Washroom in accordance with manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The sources covered under this Source Id. #120 consists of the following:

- (a) two (2) SWS-400 washing machine with attached condensers,
- (b) one SCR-350E distillation unit,
- (c) one 500 gallon dirty solvent tank, and
- (d) one 60 gallon clean solvent tank.

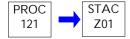
*** Permit Shield in Effect. ***





Source ID: 121 Source Name: PLANT CLEANING OPERATIONS

Source Capacity/Throughput: N/A SOLVENT



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

The permittee shall monitor the cleaning solvent use monthly.

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

The permittee shall maintain records of cleaning solvent usage for each month.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

The permittee shall maintain the following:

- (1) Solvent-laden rags shall be stored in closed containers and disposed of according to Department approved procedures.
- (2) The lid of drums and containers containing inks, and solvents shall be closed when the content is not being transferred.
- (3) Any spills of inks, and solvents shall be cleaned up as soon as possible.





VII. ADDITIONAL REQUIREMENTS.

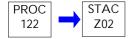
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***



Source ID: 122 Source Name: INK ROOM

Source Capacity/Throughput: N/A SOLVENT IN INK



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 129.91-95]

In the ink room, the permittee shall maintain the following:

- (a) the fifty-five (55) gallon drums, which are laid down for side dispensing, shall be equipped with a double valve system, and
 - (b) mixing vats and containers shall be closed when not in use.

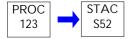
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).



Source ID: 123 Source Name: 7 SEAMERS

Source Capacity/Throughput: N/A VOC EMITTED



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa Code 129.91-95]

The permittee shall maintain records of the visual inspections of each of the seven (7) seamers at all times.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 129.91-95]

The permittee shall conduct periodic visual inspections of the seam as part of the production check of each order, for each of the seven-(7) seamers, to ensure excess seaming solution is not applied. The seamer solution will contain a fluorescent dye, or a Department approved dye, at all times to aid in visual inspection

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





Source ID: 124 Source Name: MISC. SOURCES

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code 129.91-95]

The Volatile Organic Compounds (VOC) emissions for each source listed in Condition #004 shall not exceed 3 pounds per hour, 15 pounds per day, or 2.7 tons per year on a twelve (12) month rolling basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code 127.511]

The permittee shall keep a copy of the calculations in Section H, Appendix 2 of the permit and present to the inspector upon request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Source 124 - Misc. Sources consists of the following:

Underground Storage Tank (No. 4 Fuel Oil),

Above Ground Storage Tanks,

Ink Room Office (Miscellaneous Activities),

Solvent Unloading Operations,

Solvent Degreasing Tanks,

VOCs from Combustion Equipment.



15-00004

SECTION D. Source Level Requirements

Source Name: CATALYTIC OXIDIZER M&W 1 Source ID: C03

> Source Capacity/Throughput: 4.50 MCF/HR NATURAL GAS

RESTRICTIONS. T.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

001 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and 127.511]

- (a) The permittee shall conduct a stack test once every five (5) years, to determine the overall control efficiency of the control device for VOC emissions.
- (b) The company shall use the test methods and prodecures approved by the Department.
- (c) The results shall be submitted to the Department for the review at least sixty (60) days prior to the expiration of the operating permit.

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (1) The gas temperature at the inlet to the catalyst bed of the oxidizer shall be maintained at a minimum of 450 degrees Fahrenheit.
- (2) These temperatures shall be measured prior to the catalytic bed.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The catalytic oxidizer shall be operated and maintained in a manner consistent with the Master Operations and Maintenance instructions (O&M) supplied by the manufacturer.
- (b) Operators must follow the O&M instructions and/or checklists and sign off daily.



004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

O&M INSTRUCTIONS OUTLINE FOR CATALYTIC OXIDIZER:

- (a) Daily Inspections:
 - (1) verify accuracy of operating controls
 - (2) check hand valves, manual dampers, secondary air openings and bypasses
 - (3) check blower for noise and shaft vibration
- (b) Monthly Inspections:
 - (1) test visual and audible alarm system for proper opeation
 - (2) check ignition spark electrodes for cracked insulator and proper gap setting
 - (3) check valve and valve motors for free, smooth action
 - (4) inspect thermocouples and lead wires for shorts and loose connections
 - (5) test interlock sequence of all safety equipment (manually make each interlack fail)
 - (6) test safety shut-off valves for tightness of closer
 - (7) test main fuel hand-valves for operation
- (8) test pressure switch settings by checking switch movements against pressure settings and comparing with actual impulse pressure.
 - (9) inspect all electrical contacts and switches
- (10) test all flame sensing devices and thermocouple fail-safe devices, making certain that the instrument drives in the proper direction
 - (11) inspect burners and pilots
 - (12) check ignition cable and transformers
 - (13) test all fuel lines for leaks

A copy of the O&M instructions shall be kept at the site and be made available to the Department upon request.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain the temperature sensing and recording device on each oxidizer, that can verify the combustion chamber temperature prior to and directly after the catalytic bed.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).



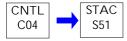
SECTION D

TOWN PA

Source ID: C04 Source Name: PILLAR CATALYTIC OXIDIZER

Source Level Requirements

Source Capacity/Throughput: 6.70 MCF/HR NATURAL GAS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

001 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and 127.511]

- (a) The permittee shall conduct a stack test once every five (5) years, to determine the overall control efficiency of the control device for VOC emissions.
- (b) The company shall use the test methods and prodecures approved by the Department.
- (c) The results shall be submitted to the Department for the review at least sixty (60) days prior to the expiration of the operating permit.

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

- (1) The gas temperature at the inlet to the catalyst section of the oxidizer shall be maintained at a minimum of 460 degrees Fahrenheit.
- (2) These temperatures shall be measured prior to the catalytic bed.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]





- (a) The catalytic oxidizer shall be operated and maintained in a manner consistent with the Master Operations and Maintenance instructions (O&M) supplied by the manufacturer.
- (b) Operators must follow the O&M instructions and/or checklists and sign off daily.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

O&M INSTRUCTIONS OUTLINE FOR CATALYTIC OXIDIZER:

- (a) Daily Inspections:
 - (1) verify accuracy of operating controls
 - (2) check hand valves, manual dampers, secondary air openings and bypasses
 - (3) check blower for noise and shaft vibration
- (b) Monthly Inspections:
 - (1) test visual and audible alarm system for proper opeation
 - (2) check ignition spark electrodes for cracked insulator and proper gap setting
 - (3) check valve and valve motors for free, smooth action
 - (4) inspect thermocouples and lead wires for shorts and loose connections
 - (5) test interlock sequence of all safety equipment (manually make each interlack fail)
 - (6) test safety shut-off valves for tightness of closer
 - (7) test main fuel hand-valves for operation
- (8) test pressure switch settings by checking switch movements against pressure settings and comparing with actual impulse pressure.
 - (9) inspect all electrical contacts and switches
- (10) test all flame sensing devices and thermocouple fail-safe devices, making certain that the instrument drives in the proper direction
 - (11) inspect burners and pilots
 - (12) check ignition cable and transformers
 - (13) test all fuel lines for leaks

A copy of the O&M instructions shall be kept at the site and be made available to the Department upon request.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall maintain the temperature sensing and recording device on each oxidizer, that can verify the combustion chamber temperature prior to and directly after the catalytic bed.

VII. ADDITIONAL REQUIREMENTS.

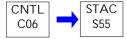
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





Source ID: C06 Source Name: CATALYTIC OXIDIZER M&W 2

Source Capacity/Throughput: 6.10 MCF/HR NATURAL GAS



I. RESTRICTIONS.

Control Device Efficiencies Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from

25 Pa. Code § 129.91-95]

The catalytic oxidizer shall operate with a 100% capture efficiency and 95% destruction efficiency for an overall control efficiency of 95 %.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and 127.511]

- (a) The permittee shall conduct a stack test once every five (5) years, to determine the overall control efficiency of the control device for VOC emissions.
- (b) The company shall use the test methods and prodecures approved by the Department.
- (c) The results shall be submitted to the Department for the review at least sixty (60) days prior to the expiration of the operating permit.

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (1) The gas temperature at the inlet to the catalyst section of the oxidizer shall be maintained at a minimum of 450 degrees Fahrenheit.
- (2) These temperatures shall be measured prior to the catalytic bed.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

The permittee shall keep records of the inlet temperature measured prior to the catalytic bed.





V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

- (a) The catalytic oxidizer shall be operated and maintained in a manner consistent with the Master Operations and Maintenance instructions (O&M) supplied by the manufacturer.
- (b) Operators must follow the O&M instructions and/or checklists and sign off daily.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

O&M INSTRUCTIONS OUTLINE FOR CATALYTIC OXIDIZER:

- (a) Daily Inspections:
 - (1) verify accuracy of operating controls
 - (2) check hand valves, manual dampers, secondary air openings and bypasses
 - (3) check blower for noise and shaft vibration
- (b) Monthly Inspections:
 - (1) test visual and audible alarm system for proper opeation
 - (2) check ignition spark electrodes for cracked insulator and proper gap setting
 - (3) check valve and valve motors for free, smooth action
 - (4) inspect thermocouples and lead wires for shorts and loose connections
 - (5) test interlock sequence of all safety equipment (manually make each interlack fail)
 - (6) test safety shut-off valves for tightness of closer
 - (7) test main fuel hand-valves for operation
- (8) test pressure switch settings by checking switch movements against pressure settings and comparing with actual impulse pressure.
 - (9) inspect all electrical contacts and switches
- (10) test all flame sensing devices and thermocouple fail-safe devices, making certain that the instrument drives in the proper direction
 - (11) inspect burners and pilots
 - (12) check ignition cable and transformers
 - (13) test all fuel lines for leaks

A copy of the O&M instructions shall be kept at the site and be made available to the Department upon request.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from





25 Pa. Code § 129.91-95]

The permittee shall maintain the temperature sensing and recording device on each oxidizer, that can verify the combustion chamber temperature prior to and directly after the catalytic bed.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The continuous airflow through all openings shall be verified by continuous observation using streamers or by methods approved by the Department.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.





SECTION F. Emission Restriction Summary.

Source Id	Source Description			
031	TITUSVILLE BOILER	2		
Emission Limit			Pollutant	
1.200	Lbs/MMBTU		SOX	
0.400	Lbs/MMBTU		TSP	_
107	DOTO #3 [1/# \A/#DE	4.000 ET /8.4INII		
107	ROTO #7 [16" WIDE;	1,000 F 1 / MIIN]		
Emission Limit			Pollutant	
47.600	Tons/Yr	For Roto No.7 & No.8	VOC	
100	DOTO #0 [24 25 MID	E 1 000 FT /MINIT		
108	ROTO #8 [21.25"WID	E; 1,000 F 1 / MIN]		
Emission Limit			Pollutant	
47.600	Tons/Yr	For Roto No.7 & No.8	VOC	
100	DADTC MACLIED			
120	PARTS WASHER			
Emission Limit			Pollutant	
11.800	Tons/Yr	12 month rolling	VOC	
104	NAICO COLIDOFO			
124	MISC. SOURCES			
Emission Limit			Pollutant	
2.700	Tons/Yr	12 month rolling	VOC	
3.000	Lbs/Hr		VOC	
15.000	Lbs/Day		VOC	

Site Emission Restriction Summary

Emission Limit	Pollutant
EIIIISSIUH EIIIII	Pollulatil





SECTION G. Miscellaneous.

- (A) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C of this permit, do not require limitations, monitoring or recordkeeping.
- (1) Space Heaters there are twenty-two (22) located throughout the facility. They have a combined rated capacity of 11.19 MMBtu/h using Natural Gas for fuel. The potential VOC and NOx emissions are less than one (1) ton per year. Source 032 Misc. Combustion sources whose actual SO2 emissions are negligible. (0.0006lb/MMBtu)
- (2) General Maintenance consists of mobile equipment, interior/exterior painting and lawn mowers. These sources are used for plant maintenance and upkeep activities and they are not part of the manufacturing process. The potential VOC for these sources are less than one (1) ton per year.
 - (3) Lab test equipment and QC lab use exclusively for chemical or physical analyses
 - (4) Two pump Testing Stations and Maintenance Operations uses only water to flush and test the pumps.
 - (5) Four Ink Jet Printers excempt under 25 Pa. Code 127.14(c)(2)
- (B) The following previously issued operating permit serves as the basis for basis for certain terms and conditions set forth in this Title V Permit:
- OP-15-0004
- (C) There are two appendices to this permit:
- (1) Appendix 1 Equations from 40 CFR Part 63 Subpart KK (National Emission Standards for the Printing and Publishing Industry)
 - (2) Appendix 2 List of Miscellaneous Sources of Source 124 and Their Supporting Calculations approved by the Department.



***** End of Report *****