SECTION 106: VOC EMISSIONS CONTROL FOR OFFSET LITHOGRAPHIC, LETTERPRESS, AND FLEXIBLE PACKAGE PRINTING AND OTHER GRAPHIC ARTS OPERATIONS

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106.1 PURPOSE

Section 106 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for graphic arts operations (defined in Section 106.3 to include offset lithographic, letterpress, and flexible package printing operations) as required by Section 182(b)(2)(A) of the Clean Air Act (CAA) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

106.2 APPLICABILITY

- (a) Except as provided under Section 106.4, Section 106 is applicable to any owner or operator of offset lithographic printing operations, letterpress printing operations, and/or flexible packaging printing operations with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year when the stationary source is located:
 - (1) In Hydrographic Area 212 (the Las Vegas Valley) in Clark County; or
 - (2) In any other hydrographic area that the Administrator has designated nonattainment for ozone and has classified as a moderate or higher ozone nonattainment area on or after January 5, 2023.
- (b) Except as provided under Section 106.4, Sections 106.7, 106.8(b)–(c), and 106.9–106.11 are applicable to any owner or operator of offset lithographic printing operations, letterpress printing operations, and/or flexible packaging printing operations with projected maximum emissions of VOC of less than 3.0 tons per calendar year when the stationary source is located:
 - In Hydrographic Area 212 (the Las Vegas Valley) in Clark County;
 or
 - (2) In any other hydrographic area that the Administrator has designated nonattainment for ozone and has classified as a moderate or higher ozone nonattainment area on or after January 5, 2023.
- (c) Section 106 does not apply:
 - (1) If the stationary source uses less than 500 gallons (1,892 L) or 5,000 pounds (2,268 kg) of graphic arts material per calendar year in graphic arts operations.
 - (2) When graphic arts materials are used in the following operations:

- (A) Circuitry printing, and other associated printing, performed for labeling, logo, or identification purposes on a printed circuit, its substrate, its immediate covering, or its immediate encapsulant by a circuitry printer.
- (B) Coating applications that are considered coating operations but are not performed in association with a printing operation.
- (C) Printing conducted with digital printing equipment.
- (D) Screen printing operations.

106.3 DEFINITIONS

Unless the context requires otherwise, the following terms shall have the meanings set forth below for the purposes of this section. When a term is not defined, it shall have the meaning provided in Section 0 of the Clark County Air Quality Regulations (AQRs), Chapter 445B of the Nevada Revised Statutes (NRS), the Act, or common usage, in that order of priority.

"Adhesive" means a material applied for the primary purpose of bonding two surfaces together by surface attachments. Adhesives may be used to facilitate the attachment of two surfaces or substances in varying degrees of permanence.

"Alcohol" means a volatile organic compound such as isopropanol, normal-propanol, or ethanol—of alkane structure consisting of fewer than six carbon atoms and having a single OH– (hydroxyl) group and no other non-alkane attachments.

"Alcohol substitute" means a wetting agent used to replace any portion of alcohol in fountain solutions, and usually containing VOC such as glycols and glycol ethers.

"Circuitry printing" means any graphic arts operation that either uses ink(s) with specific electrical properties to print an electrical circuit or prints a circuit pattern that is made into an electrical circuit through further processing.

"Cleaning material" or "cleaning solvent" means any liquid, including an automatic blanket and roller wash system or manual blanket wash and roller wash, used to remove materials from the operating surfaces of a printing press (or any attached parts of a press), from stand-alone press cleaning machines that are integral to the production process, and from the surrounding work area.

"Cover" means a lid or top adequately fitted to shield the contents in the container from air disturbances, such as ventilation fans and general room drafts.

"Digital printing" means a method of printing that does not use a physical master, stencils/screens, cylinders, or plates, but rather an electronic output device to transfer

variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing, and solid ink printing.

"Emissions Control System (ECS)" means the combination of an emissions capture device and an add-on emissions control device that reduces VOC emissions and that is designed and operated in accordance with good engineering practice.

"Existing graphic arts operations" means graphic arts operations for which the owner or operator began actual construction or reconstruction before May 21, 2024, or first constructed and operated on or after May 21, 2024, and subsequently modified such that the graphic arts operations became subject to Section 106 after the modification.

"Existing inventory" means graphic arts materials that an owner or operator purchased before May 21, 2024.

"Flexible package printing operation" means a printing process for applying words, designs, or pictures to a substrate that is designed to be used as non-rigid packaging material. Flexible package printing operations typically use flexographic or rotogravure printing operation methods. Shrink-wrap labels or wrappers printing conducted on or inline with a flexible package printing press are considered flexible package printing operation, while printing of self-adhesive labels is not.

"Flexographic printing operation" means a printing process for applying words, designs, or pictures to a substrate using a technique that transfers the image onto a substrate by applying a liquid ink to an anilox roller engraved with small cells. The ink-filled cells are wiped by a doctor blade, and then the ink is transferred onto a raised pattern of the image carrier that encircles a second roller. The inked image is then transferred to the substrate to produce a printed output.

"Fountain solution" means a mixture of water and other volatile and nonvolatile chemicals and additives applied to a lithographic plate to maintain the hydrophilic properties of the nonimage areas and to keep the nonimage areas free from ink.

"Graphic arts coating" means a material applied after the application of inks to the substrate to enhance or protect all or part of the printed substrate. These coatings include graphic arts varnish, water-based or radiation-cured formulations of resins, solvents, cosolvents, and other additives. These materials are regulated by this rule only when used in association with regulated printing operations.

"Graphic arts material" means any VOC-containing material, such as printing ink, varnish, graphic arts coating, adhesive, solvent, fountain solutions, and cleaning materials (including added thinner or retarder), used in a regulated printing operation.

"Graphic arts operations" means offset lithographic, letterpress, and/or flexible package printing operations, which also includes in-line and off-line coating and laminating

processes when these are performed in association with offset lithographic, letterpress, or flexible package printing operations.

"Heatset" means a lithographic web printing process where heat is used to evaporate ink oils from the printing ink that has been applied to the substrate.

"In use" means the active application of graphic arts material by pouring, siphoning, brushing, rolling, padding, wiping, or other methods, or the filling or draining of a container holding graphic arts material.

"Letterpress printing operations" means the application of words, designs, or pictures using a method in which the image area is raised relative to the nonimage area and the paste ink is transferred to the substrate directly from the image surface.

"Material change" means a change in the owner or operator, a change in location, a change in compliance method, a change to a different ECS, or an increase in either the stationary source's projected maximum emissions or its annual actual emissions of VOC above the projected maximum emissions.

"New graphic arts operations" means graphic arts operations for which the owner or operator began actual construction or reconstruction on or after May 21, 2024.

"Non-heatset" means a lithographic printing process where the printing inks are set by absorption or oxidation of the ink oils. For the purpose of this rule, use of an infrared heater or printing conducted using radiation-cured inks is considered non-heatset.

"Offset lithographic printing operations" means the application of words, designs, or pictures using a planographic method of printing in which the image and nonimage areas are on the same plane and the ink is transferred from a plate to an intermediary surface, typically a rubber blanket, that in turn transfers the image to the substrate. It includes the application of overprint coatings.

"Printing operation" means an operation that imparts color, design, pattern, alphabet, or numerals onto a substrate. It differs from coating in that its principal intent is to accomplish such visual/spatial outcome(s), rather than other purposes commonly accomplished by using coatings.

"Printing ink" means a fluid or viscous formulation used in graphic arts operations to impress or transfer an image onto a substrate.

"Projected maximum emissions" means the highest annual rate, in tons per year, at which the stationary source is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates that does not include emission reductions from add-on controls.

"Rotogravure printing operations" means an intaglio process in which ink is carried in minute, etched, or engraved wells on a roll or cylinder. Images are transferred onto a substrate by applying ink to the etched roll or cylinder, wiping the lands between the cells free of ink with a doctor blade, and rolling the cylinder over the substrate so the surface of the substrate is pressed into the cells, transferring the ink onto the substrate.

"Screen printing" means the application of words, designs, or pictures using a process of passing printing ink through a screen to make an imprint on a substrate. A refined form of stencil is applied to the screen beforehand such that the stencil openings determine the form and dimensions of the imprint.

"Sheetfed" means a lithographic printing process in which individual sheets of substrate are fed to the press sequentially.

"Solvent" means any substance containing an organic compound (or combination of organic compounds) that is liquid at atmospheric pressure and ambient temperature and is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or other additive used for a similar purpose. It does not include substances used as fuel, antiseptics, or anesthetics.

"Vapor pressure" means the pressure exerted at a uniform temperature by the gas of a substance when the gas is in equilibrium with the liquid (or solid) phase of that substance.

"VOC vapor pressure" or "VOC composite partial pressure" means the sum of the partial pressures of the compounds defined as VOC, calculated using (1) ASTM D2879-97 (2007), "Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope"; (2) certified data from a laboratory or manufacturer revealing the exact formulation, or a product data sheet showing the material name and VOC vapor pressure; or (3) the following equation:

$$PPC = \frac{\sum_{i=1}^{n} \frac{(Wi)(VPi)}{MWi}}{\frac{Ww}{MWw} + \sum_{c=1}^{n} \frac{Wc}{MWc} + \sum_{i=1}^{n} \frac{Wi}{MWi}}$$

where:

 W_i = weight of the ith VOC compound in grams

 W_w = weight of water in grams

 W_c = weight of exempt compound in grams

 MW_i = molecular weight of the ith VOC compound in g/g-mol

 MW_w = molecular weight of water in g/g-mol

 MW_c = molecular weight of exempt compound in g/g-mol

 $PP_c = VOC$ composite partial vapor pressure at 20°C in mm Hg

VP_i = vapor pressure of the ith VOC compound at 20°C in mm Hg.

"Waste material" means any VOC-containing material designated for disposal, including VOC-laden rags and wipes, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and all their residues associated with regulated printing operations.

"Web" means a continuous substrate capable of being rolled at any point during the coating process.

106.4 EXEMPTIONS

Unless and until the Control Officer objects to an owner or operator's use of an exemption in accordance with Section 106.10, graphic arts operations that meet the criteria in this section are exempt from one or more requirements of Section 106 if the owner or operator complies with the notification, recordkeeping, and reporting requirements in Section 106.10, as applicable.

- (a) Sections 106.5–106.9 (related to emissions standards, work practice requirements, compliance obligations, and registration requirements) and 106.10.1(a), 106.10.2, and 106.10.3 (related to testing notification, recordkeeping, and reporting requirements) do not apply when VOC emissions from the graphic arts operations are controlled by RACT emissions standard(s) at least as stringent as Section 106 under another SIP-approved applicable section of the AQRs.
- (b) Sections 106.5–106.8 (related to emissions standards, work practice requirements, and compliance obligations) do not apply when:
 - (1) For sheetfed non-heatset offset lithography operations or non-heatset web offset lithography operations: the owner or operator limits the combination of cleaning solvent and fountain solution additive used to less than a total of 855 gallons (3,237 L) in any calendar year.
 - (2) For heatset web offset lithography (uncontrolled): the owner or operator limits the combination of printing ink, cleaning solvent, and fountain solution additives used to less than 6,000 pounds (2,722 kg) in any calendar year.
 - (3) For flexible package printing operations using water-based or ultraviolet-cured inks: the owner or operator limits the combination of water-based or ultraviolet-cured inks, coatings, and adhesives used to less than 24,000 pounds (10,886 kg) in any calendar year.
 - (4) For flexible package printing operations (uncontrolled) using solvent inks: the owner or operator limits the combination of printing ink, coating, adhesives, dilution solvents, and cleaning

- solvents used to less than 6,000 pounds (2,722 kg) in any calendar year.
- (c) Section 106.5(a) (related to fountain solution VOC content requirements) does not apply to:
 - (1) Any sheetfed press with a maximum sheet size of 11 by 17 inches or less; or
 - (2) Any press with a total fountain solution reservoir of less than 1 gallon (3.8 L).
- (d) Section 106.5(b) (related to emissions control requirements for offset lithographic and letterpress printing operations) does not apply to:
 - (1) Any heatset web press dryer with an uncontrolled potential to emit VOC of 25 tons or less per calendar year;
 - (2) Use of sheetfed or coldset web inks, sheetfed or coldset web varnishes, waterborne coatings, or radiation (ultra-violet light or electron beam) cured materials,
 - (3) Any heatset web press used for book printing; and
 - (4) Any heatset web press with a maximum web width of 22 inches (56 cm) or less.
- (e) Section 106.5(c) (related to cleaning material requirements) does not apply to the use of any cleaning materials provided the total volume of noncomplying cleaning materials is less than 110 gallons (416 L) per calendar year in offset lithographic and letterpress printing operations.
- (f) Section 106.5(c) (related to cleaning material requirements) does not apply to:
 - (1) Cleaners used on electronic components of a press;
 - (2) Pre-press cleaning operations;
 - (3) Post-press cleaning operations;
 - (4) Cleaning supplies used to clean the floor (other than dried ink) around the press; or
 - (5) Cleaning performed in parts washers or cold cleaners.
- (g) Section 106.7(c) (related to covering containers) does not apply to sheetfed offset and letterpress printing inks that use low volatility ink

oil as the solvent (such that a top layer will dry and form a film over the remainder of the ink in the container).

106.5 EMISSION STANDARDS FOR OFFSET LITHOGRAPHIC AND LETTERPRESS PRINTING OPERATIONS

An owner or operator of offset lithographic operations shall limit VOC emissions from graphic arts operations by complying with paragraphs (a), (b), and (c) of this section. An owner or operator of letterpress printing operations shall limit VOC emission from graphic arts operations by complying with paragraphs (b) and (c) of this section.

(a) Except as provided in Section 106.4, an owner or operator of offset lithographic printing operations shall limit the concentration of alcohol, alcohol substitute, and any other VOC in each fountain solution to the percentages in Table 1.

Table 1. Maximum VOC Content in Percent by Weight (as Applied) for Fountain Solutions for Offset Lithographic Printing

	Maximum VOC Content for:			
Press Type	Fountain Solutions Containing Alcohol	Fountain Solutions Containing Alcohol Refrigerated at or Below 60°F (15.5°C)	Fountain Solutions Containing Alcohol Substitutes	
Heatset web	1.6%	3.0%	5%	
Sheetfed	5%	8.5%	5%	
Cold-set web	None	None	5%	

(b) Except as provided in Section 106.4, an owner or operator of heatset offset lithographic or heatset letterpress printing operations shall maintain dryer pressure lower than the press room air pressure such that air flows into the dryer whenever the press is operating and shall meet the emission control requirements in Table 2.

Table 2. Control Efficiencies Requirements for Heatset Offset Lithographic and Heatset Letterpress Printing Operations

Emissions Control System Installation Date	Minimum Control Efficiency	
Installed prior to May 21, 2024	90% by weight control efficiency for VOC emissions from the dryer exhaust vent or VOC concentration at or below 20 ppm per volume as hexane on a dry basis as measured at the dryer exhaust vent	
Installed on or after May 21, 2024	95% by weight control efficiency for VOC emissions from the dryer exhaust vent or VOC concentration at or below 20 ppm per volume as hexane on a dry basis as measured at the dryer exhaust vent	

(c) Except as provided in Section 106.4, an owner or operator of offset lithographic or letterpress printing operations shall reduce VOC emissions from blanket washing, roller washing, plate cleaners,

metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink from areas around the press, by meeting one of the following requirements:

- Use cleaning materials with a VOC composite partial vapor pressure of less than 10 mm Hg at 68°F (20°C); or
- (2) Use cleaning materials containing less than 70% VOC by weight.

106.6 EMISSION STANDARDS FOR FLEXIBLE PACKAGE PRINTING OPERATIONS

Except as provided in Section 106.4, an owner or operator of flexible package printing operations shall limit VOC emissions from such operations by complying with paragraph (a) or (b) of this section.

- (a) The owner or operator shall use low VOC content materials, or use low VOC content materials in combination with an ECS that meets one of the following VOC content limits:
 - (1) 1.76 lb VOC/lb of solids (0.8 kg VOC/kg of solids), as applied; or
 - (2) 0.35 lb VOC/lb of graphic arts material (0.16 kg VOC/kg graphic arts material), as applied.
- (b) The owner or operator shall maintain dryer pressure lower than the press room air pressure such that air flows into the dryer at all times when the press is operating and shall meet the ECS requirements in Table 3.

Table 3. Control Efficiencies Requirements for Rotogravure and Flexographic Printing Operations

Press and ECS Installation Dates	Minimum Overall Capture and Control Efficiency	Minimum Capture Efficiency	Minimum Control Efficiency
Press first installed prior to March 14, 1995, and now controlled by an add-on ECS installed prior to May 21, 2024	65%	75%	90%
Press installed prior to March 14, 1995, and controlled by an add-on ECS installed on or after May 21, 2024	70%	75%	95%
Press installed on or after March 14, 1995, and controlled by an add-on ECS whose first installation date was prior to May 21, 2024	75%	85%	90%
Press installed on or after March 14, 1995, and controlled by an add-on ECS whose first installation date was on or after May 21, 2024	80%	85%	95%

106.7 WORK PRACTICES REQUIREMENTS FOR USING, STORING, HANDLING, AND DISPOSING OF GRAPHIC ARTS MATERIAL

An owner or operator of graphic arts operations shall comply with the following requirements of this section to minimize VOC emissions to the atmosphere:

- (a) Ensure all containers with a capacity of 1 gallon (3.8 L) or more are clearly labeled with the product name and the type of graphic arts or waste material inside.
- (b) Repair any liquid leak, visible tear, or crack detected in a storage container within one calendar day or drain all contents from the leaking container and transfer into a container meeting the requirements of paragraph (d) of this section. The owner or operator may not use the leaking container until repaired or replaced.
- (c) Cover all containers holding graphic arts or waste material when not in use, and store solvent-laden rags and wipes in closed containers when not in use.
- (d) Use closed, nonabsorbent, nonleaking containers to store and dispose of graphic arts and waste material, including used rags and wipes.
- (e) Use care when handling and transferring graphic arts and waste material to and from containers, enclosed systems, waste receptacles, and other equipment to minimize spills; immediately contain and clean up any spills that occur.
- (f) Use closed and labeled containers or pipes to convey graphic arts and waste material from one location to another.

106.8 COMPLIANCE OBLIGATIONS

To demonstrate compliance with the emissions standards and work practices in Section 106, an owner or operator of graphic arts operations shall:

- (a) Identify the VOC content of all graphic arts materials using information provided by the manufacturer.
- (b) Conduct periodic (at least quarterly) inspections to assure compliance with the requirements of Section 106.7.
- (c) Provide training to newly hired workers on the work practices requirements of Section 106.7.

106.8.1 Compliance When Using an Emissions Control System

An owner or operator of graphic arts operations using an ECS shall:

- (a) Develop, maintain, and comply with an operations and maintenance plan, in accordance with manufacturer recommendations where available, if using an ECS to comply with Section 106. Such plan shall:
 - (1) Identify monitoring devices, monitoring frequencies, and key system operating parameters, i.e., those needed to ensure that good operation and engineering practices are associated with operation of the ECS, such as temperature, pressure, and/or flow rate.
 - (2) Include schedules for inspection, schedules for anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
 - (3) Include a monitoring plan to ensure proper operation of the ECS using the key operating parameters identified.
 - (4) Include provisions for minimizing emissions during periods of startup, shutdown, and malfunction.
 - (5) Determine the control efficiency of the ECS used to comply with Section 106 through manufacturer design specifications or performance testing under normal or representative operating conditions. The following reference materials may assist in determining the control efficiency of the ECS:
 - (A) "Guidelines for Determining Capture Efficiency," EPA Office of Air Quality Planning and Standards, January 9, 1995.
 - (B) EPA Test Methods 1–4 in 40 CFR Part 60, Appendices A–1 through A–3, to determine flow rates.
 - (C) "Method 204–Criteria for and Verification of a Permanent or Temporary Total Enclosure," at 40 CFR Part 51, Appendix M; or, as applicable, EPA Test Methods 204A, 204B, 204C, or 204D unless it is demonstrated that there is negative air pressure flow to the dryer from the surrounding pressroom air.
 - (D) "Method 18–Measurement of Gaseous Organic Compound Emissions by Gas Chromatography," at 40 CFR Part 60, Appendix A–6.
 - (E) "Method 25–Determination of Total Gaseous Nonmethane Organic Emissions as Carbon," at 40 CFR Part 60, Appendix A–7, or, as applicable, EPA Test Methods 25A or 25B.

- (b) Install, calibrate, operate, and maintain monitoring devices on an ECS used to comply with Section 106 according to manufacturer specifications and the operations and maintenance plan.
- (c) Operate the monitoring devices required by paragraph (b) of this section at all times an ECS operates.

106.9 REGISTRATION REQUIREMENTS

An owner or operator of graphic arts operations shall comply with the registration requirements of this section, as indicated below.

- (a) Except as provided in paragraph (d) of this section, an owner or operator of graphic arts operations shall comply with the following registration requirements:
 - (1) No later than November 17, 2024, or 45 days after becoming subject to any requirements in Section 106, whichever is later, submit a registration application to the Control Officer in the manner and form prescribed that includes, at a minimum, the following information:
 - (A) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (B) Company name and address (and source name and address, if different);
 - (C) Type of graphic arts operation(s);
 - (D) Projected maximum emissions of VOC (in tons per calendar year) from graphic arts operations at the stationary source;
 - (E) Calculations to support the values reported in paragraph (a)(1)(D) of this section;
 - (F) Type of ECS used to comply with Section 106, if any;
 - (G) Copy of the ECS operations and maintenance plan developed to comply with Section 106.8.1, if required;
 - (H) A declaration signed by the Responsible Official under penalty of perjury that the statements and information in the registration are true, accurate, and complete. Signature on the declaration statement shall subject the Responsible Official to liability for perjury under NRS 199.145; and
 - (I) Other information as required by the Control Officer.

- (2) Submit an updated registration to the Control Officer within 60 days of a material change.
- (b) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 106.2(a).
- (c) Owners or operators may submit a revised registration application with reduced projected maximum emissions from graphic arts operations at the stationary source if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
- (d) In lieu of complying with the registration requirements of Section 106.9, but by the deadlines established in paragraph (a)(1), a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision to incorporate Section 106 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

106.10 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator of graphic arts operations shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny exemption use or applicability status upon finding that the graphic arts operation does not meet the eligibility criteria for the exemption(s), the stationary source has a poor regulatory compliance history, or the RACT emissions standard does not provide comparable emission reductions to Section 106.

106.10.1 Notification Requirements

- (a) Owners or operators using a performance test to determine the control efficiency of an ECS to comply with Section 106 shall comply with the following requirements and with the compliance dates in Section 106.11:
 - (1) Conduct a performance test within 180 days of initial operation of the ECS or by November 17, 2024, whichever is later, or provide documentation of a successfully completed stack test performed within five years prior to May 21, 2024.
 - (2) Submit a performance testing protocol to the Control Officer in accordance with department guidelines containing test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but no more than 90 days, before the anticipated test date.

- (3) Submit a report to the Control Officer in accordance with department guidelines describing the results of a performance test within 60 days of completing the test.
- (b) Owners or operators relying on the exemption in Section 106.4(a) shall submit a notice to the Control Officer that identifies the exemption claimed by the owner or operator within 30 days of the applicable compliance date in Section 106.11.

106.10.2 Recordkeeping Requirements

An owner or operator of graphic arts operations shall comply with the following recordkeeping requirements:

- (a) Owners or operators required to comply with Section 106 shall, at a minimum:
 - (1) Maintain records to document eligibility for applicability thresholds or for any exemption claimed under Section 106.4.
 - (2) Retain all records for a period of five years from their creation.
 - (3) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
 - (4) Each month, record the type and amount of graphic arts material used in the previous month. The owner or operator may track the actual use of graphic arts material or use purchase and inventory records (assuming that all purchases not retained in inventory are used).
 - (5) Maintain a list of graphic arts material used that includes, at a minimum:
 - (A) Material name and manufacturer:
 - (B) VOC content of each graphic arts material, listed as lb/gal or g/L of VOC;
 - (C) Product data sheet or technical data sheet with specific mixing instructions and the VOC content, as applied, of VOC-containing material requiring dilution; and
 - (D) VOC composite vapor pressure at 68°F (20°C).
 - (6) Maintain a record of calendar year emission calculations.

- (b) Owners or operators using noncompliant cleaning materials, as allowed under Section 106.4(e), shall keep a separate list to demonstrate compliance with the exemption, including, at a minimum:
 - (1) Material name and manufacturer; and
 - (2) Monthly and annual total gallons or liters of noncompliant cleaning materials used.
- (c) Owners or operators using an ECS to comply with Section 106 shall:
 - (1) Maintain a record of monitoring of the key system operating parameters specified in the operations and maintenance plan.
 - (2) Record and maintain monitoring data collected to comply with Section 106.8.1(b).
- (d) Owners or operators required to comply with Sections 106.7 and 106.7(b)–(c) shall maintain inspection and training logs.
- (e) Owners or operators relying on an exemption in Section 106.4(b) shall keep a separate list of the amount of graphic arts materials used to demonstrate compliance with the exemption, including, at a minimum:
 - (1) Material name and manufacturer; and
 - (2) Monthly and annual total gallons (liters) or pounds (kg) of the applicable graphic arts materials used.
- (f) Owners or operators relying on the exemption in Section 106.4(d)(1) shall record the potential to emit of each dryer before consideration of the emissions control efficiency of the ECS.

106.10.3 Reporting Requirements

- (a) Owners or operators subject to Section 106.2(a) shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date upon prior notice from the Control Officer) and shall include emission factors and calculations used to determine emissions in the previous calendar year.
- (c) The inventory shall include, at a minimum:

- Actual annual emissions of VOC (in tons per calendar year) for the previous calendar year from graphic arts operations at the stationary source; and
- (2) Calculations to support the values reported in paragraph (c)(1) of this section.
- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

106.11 COMPLIANCE DATES

- (a) Except as provided in paragraphs (c)–(e) of this section, an owner or operator of existing graphic arts operations shall begin to comply with the requirements in Section 106 by November 17, 2024, or by the date the graphic arts operations commence normal operations or meet the applicability criteria in Section 106.2, whichever of the three dates is later.
- (b) An owner or operator of a new graphic arts operation shall comply with Section 106 upon commencing normal operations.
- (c) An owner or operator of existing graphic arts operations may use graphic arts materials from existing inventory that do not meet the requirements of Sections 106.5–106.6 until May 21, 2025, or 12 months after first becoming subject to Section 106, whichever is later. Beginning on the compliance date specified in paragraph (a) of this section, the owner or operator shall not purchase graphic arts material that does not comply with VOC content requirements in Section 106 unless the emissions from such material(s) are controlled in accordance with the requirements of Sections 106.5(b) and/or 106.6, as applicable.
- (d) An owner or operator of existing graphic arts operations who elects to comply with Section 106 by installing a new ECS shall comply with Sections 106.5(b) and/or 106.6, as applicable, no later than November 12, 2025.
- (e) The Control Officer may establish an alternative compliance date for meeting Sections 106.5–106.6 not later than May 21, 2027, considering the technical feasibility and time needed to comply, through issuance of a minor source permit or an authority to construct permit, or by revising a Part 70 operating permit. The filing of a complete application for a minor source permit, authority to construct permit, or Part 70 significant permit revision requesting an alternative

compliance date stays the compliance date in paragraph (a) of this section until the proposed alternative compliance date, or until the Control Officer denies the request or issues the minor source permit, the authority to construct permit, or a revised Part 70 operating permit.

History: Adopted May 7, 2024