250-RICR-120-05-21

TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 120 – AIR RESOURCES

SUBCHAPTER 05 - AIR POLLUTION CONTROL

PART 21 - Control of Volatile Organic Compound Emissions from Printing Operations

21.1 Purpose and Authority

21.1.1 Purpose

The purpose of this regulation is to limit volatile organic compound emissions from printing operations.

21.1.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(19) and R.I. Gen. Laws Chapter 23-23, and have been promulgated pursuant to the procedures set forth in the Rhode Island Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

21.2 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state laws, goals and policies.

21.3 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

21.4 Incorporated Materials

These regulations hereby adopt and incorporate 40 C.F.R. § 60 Appendix A-7 Methods 24, 24A, 25, and 25A (2018) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

21.5 Definitions

- A. Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to Part 0 of this Subchapter (General Definitions). As used in this regulation, the following terms shall, where the context permits, be construed as follows:
 - "Capture efficiency" means the ratio of VOC emissions delivered to the control device to the total VOC emissions resulting from operation of a flexible package printing press and related cleaning, expressed as a percentage;
 - "Cleaning" means with respect to printing press operations, cleaning of a press or press parts or the removal of dried ink from areas around the press.
 - a. "Cleaning" does not include cleaning of electronic components, cleaning in platemaking or binding operations, housekeeping activity near a press or the use of a parts washer or cold cleaner.
 - 3. "Cleaning solution" means any liquid solvent or solution used to clean the operating surfaces of a printing press and its parts. For purposes of this regulation, cleaning solutions include, but are not limited to, blanket wash, roller wash, metering roller cleaner, plate cleaner, impression cylinder washes, rubber rejuvenators, and other cleaners used for cleaning a press, press parts, or to remove dried ink or coating from areas around the press.
 - 4. "Coldset" or "non-heatset" means a printing process in which the ink dries on the substrate through ordinary evaporation and absorption. For the purposes of this Part, ultraviolet-cured and electron beam-cured inks are considered coldset or non-heatset.
 - 5. "Control device efficiency" means the ratio of VOC emissions recovered or destroyed by the control device to the total VOC emissions that are introduced into the device, expressed as a percentage.
 - 6. "Emission baseline" means a level of emissions calculated by multiplying two factors:
 - a. The lowest of the source's actual or allowable emission rate in emissions per unit of production; and
 - b. The source's actual capacity utilization, or units of production, over some representative time period. Generally, the time period is the

preceding two (2) years unless the source can demonstrate that those years were not representative of historical production.

- 7. "Flexible package" means any package or part of a package the shape of which may be readily changed. A "flexible package" includes any bag, pouch, liner or wrap made of paper, plastic, film, aluminum foil, or metalized or coated film or paper, alone or in combination.
 - a. Flexible package does not include any folding carton, self-adhesive labels, gift wrap, wall covering, vinyl products, decorative laminates, floor coverings or tissue products.
- 8. "Flexographic printing" means the application of words, designs and/or pictures to a substrate by means of a roll-printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
- 9. "Fountain solution" means with respect to offset lithographic printing, a water-based solution that contains small amounts of gum Arabic or synthetic resins, acids, buffer salts and a wetting agent or dampening aid applied to the image plate to reduce the surface tension of the solution.
- 10. "Fountain solution reservoir" means the collection tank that accepts fountain solution recirculated from printing unit(s). In some cases, the tanks are equipped with cooling coils for refrigeration of the fountain solution.
- 11. "Heatset" means a lithographic printing process where the printing inks are set by the evaporation of ink oils in a heatset dryer.
- 12. "Heatset dryer" means any device used in heatset web offset lithographic printing to heat the printed substrate and to promote the evaporation of ink oils.
- 13. "Letterpress printing" means a printing process in which the image area is raised relative to the non-image area, and the paste ink is transferred to the substrate directly from the image surface;
- 14. "Lithographic printing" means a printing process in which the image and non-image areas are chemically differentiated, i.e., the image area is oil receptive and the non-image area is water receptive.
- 15. "Offset lithographic printing" means a printing process that transfers the ink film from the lithographic plate to an intermediary surface which is a

- rubber covered roller or blanket, which, in turn, transfers the ink film to the substrate.
- 16. "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film or other substrates, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold.
- 17. "Printing press" means equipment used to apply words, pictures, or graphic designs to either a continuous substrate or a sheet. A continuous substrate consists of paper, plastic, or other material that is unwound from a roll, passed through coating or ink applicators and any associated drying areas. The press includes all coating and ink applicators and drying areas between unwind and rewind of the continuous substrate. A sheet consists of paper, plastic, or other material that is carried through the process on a moving belt. The press includes all coating and ink applicators and drying operations between the time that the sheet is put on the moving belt until it is taken off.
- 18. "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or and other types of printed materials.
- 19. "Retention factor" means the factor relating to the portion of volatile organic compounds contained in inks and cleaning solution is that retained in the printed web or in the shop towels used for cleaning.
- 20. "Roll printing" means the application of words, designs and/or pictures to a substrate by means of a series of hard rubber or steel rolls each with only partial coverage.
- 21. "Rotogravure printing" means the application of words, designs and/or pictures to a substrate by means of a roll-printing technique, in which the pattern to be applied by the printing roll is accomplished by an intaglio or recessed image areas in the form of cells.
- 22. "Sheet-fed printing" means with respect to offset lithographic printing, a process in which individual sheets of paper or other substrate are fed to the press.
- 23. "Specialty printing" means all other rotogravure and flexographic printing operations, excluding publication printing and packaging printing.

- 24. "Volatile organic compound" or "VOC" means "Volatile Organic Compound and Halogenated Organic Compound" or "VOC and HOC".
- 25. "Web printing" means with respect to offset lithographic printing, a process where continuous rolls of substrate material are fed to the press and rewound or cut to size after printing.

21.6 Applicability

- A. This regulation applies to any roll, specialty, rotogravure, and flexographic printing facility whose potential to emit volatile organic compounds from printing operations is or ever has been, equal to or greater than fifty (50) tons/year.
- B. This regulation applies to any offset lithographic and letterpress printing facility whose combined actual emissions, before controls, during any consecutive 12-month period equal or exceed three (3) tons of VOC's.
 - 1. For determining applicability with § 21.6(B) of this Part the following retention factors should be used:
 - a. A twenty percent (20%) volatile organic compound retention factor shall be used for heatset inks, meaning eighty percent (80%) of the volatile organic compounds in the ink is emitted during the printing process.
 - b. A ninety-five percent (95%) volatile organic compounds retention factor shall be used for sheet-fed and non-heatset web inks printed on absorptive substrates, meaning five percent (5%) of the volatile organic compounds in the ink are emitted during the printing process.
 - c. A fifty percent (50%) volatile organic compounds retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a volatile organic compounds composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F) if the contaminated shop towels are kept in closed containers. This means fifty percent (50%) of the VOC used on the shop towels is emitted during the cleaning process.
- C. This regulation applies to any flexographic or rotogravure press at a flexible package printing facility whose combined actual emissions, before controls, during any consecutive 12-month period equal or exceed three (3) tons of VOC's.

21.7 Emission Limitations

21.7.1 Rotogravure and Flexographic Printing

- A. The owner or operator of a rotogravure, flexographic, or specialty printing facility subject to this regulation and employing solvent-containing ink may not operate, cause, allow or permit the operation of the facility unless one of the following is complied with at all times:
 - 1. The volatile fraction of ink, as it is applied to the substrate, contains not more than twenty-five percent (25%) by volume of organic solvent and not less than seventy-five percent (75%) by volume of water, or
 - 2. The ink as it is applied to the substrate, less water, contains not less than sixty percent (60%) by volume of nonvolatile material (solids), or
 - 3. The installation of one or more approved volatile organic compound control device(s), as limited by §§ 21.7.1(B) and 21.7.1(G) of this Part, is certified to achieve at least a ninety percent (90%) reduction efficiency as measured across each control device, or
 - 4. An alternative measure is employed which has been demonstrated to the satisfaction of the Director to have a volatile organic compound emission reduction at least equivalent to an amount potentially achieved by §§ 21.7.1(A)(1) or (2) of this Part. All alternative measures must be submitted for EPA approval as a source-specific SIP revision.
- B. A capture system must be used in conjunction with the emission control devices installed per § 21.7.1(A)(3) of this Part. The design and operation of a capture system must be consistent with good engineering practice, and, in conjunction with the control device, must provide for an overall reduction in volatile organic compound emissions at each printing press of at least:
 - 1. Seventy-five percent (75%) where publication rotogravure printing process is employed, or
 - 2. Sixty-five percent (65%) where packaging rotogravure printing process or specialty printing process is employed, or
 - 3. Sixty percent (60%) where flexographic printing process is employed.
- C. Facilities using add-on controls to comply with § 21.7.1(A) of this Part must show that the equipment meets specific capture and control performance standards which will be set in an enforceable document.

D. Control device efficiency will be determined using EPA-approved test methods. Calculations will be done on a solids-applied basis. Continuous compliance will be maintained at all times. Compliance averaging times will be met according to the control device chosen and EPA test methods, incorporated in § 21.4 of this Part, as follows:

Compliance Method	EPA Reference Test Method	Test Averaging Time
Reformulation	40 C.F.R. § 60 Appendix A-7 Method 24	Instantaneous
Solvent destruction or solvent recovery except carbon adsorption	40 C.F.R.§ 60 Appendix A-7 Method 25	3 hours
Carbon adsorption	40 C.F.R. § 60 Appendix A-7 Method 25 or other test method as appropriate	7 day rolling average

- E. Other methods may be approved by the Director and EPA. Once the control efficiency has been determined for any add-on control device by 40 C.F.R. § 60 Appendix A-7 Method 25, incorporated in § 21.4 of this Part, or any alternative method approved by the Director and EPA, compliance shall be determined on an instantaneous basis (e.g. determined control efficiency shall be used to calculate whether samples from the process meet the applicable emissions limit.)
- F. The owner or operator of a facility using carbon adsorption as a control measure shall obtain data on daily solvent usage and solvent recovery and determine the solvent recovery efficiency of the system every day. The recovery efficiency for each day shall be computed as the ratio of the total recovered solvent for that day and the prior six (6) consecutive operating days to the total solvent usage for the same 7-day period. This ratio shall be expressed as a percentage. Facilities may apply to the Director for an alternative averaging time if meeting the emission limitation as a 7-day rolling average is not technically or economically feasible. In no event shall the averaging period exceed a 30-day rolling period. All alternative averaging periods must be consistent with EPA guidance.
- G. Control and capture equipment installed per §§ 21.7.1(A)(3) and 21.7.1(B) of this Part, will be incorporated in a permit issued in accordance with Part 9 of this

Subchapter (Air Pollution Control Permits) or by approval. Compliance with the permit or approval will be determined, when necessary, with DEM and EPA approved test methods. The permit or approval will include record keeping and test methods required to demonstrate compliance.

21.7.2 Offset Lithographic and Letterpress Printing

- A. Requirements for fountain solutions:
 - 1. The owner or operator of a heatset web offset lithographic printing facility subject to this regulation, with a fountain solution reservoir of at least one gallon in capacity shall:
 - a. Limit the as-applied VOC content of the fountain solution to 1.6% by weight or less;
 - b. If the fountain solution is refrigerated to below sixty degrees Fahrenheit (60°F), limit the as-applied VOC content of the fountain solution to three percent (3%) by weight or less; or
 - c. Use fountain solution that contains no alcohol and limit the alcohol substitute content of the fountain solution to five percent (5%) by weight or less.
 - 2. The owner of a sheet-fed offset lithographic printing press with a minimum sheet size of greater than 11x17 inches and a fountain solution reservoir greater than one (1) gallon in capacity shall:
 - a. Limit the as-applied VOC content of the fountain solution to five percent (5%) by weight or less;
 - b. If the fountain solution is refrigerated to below sixty degrees Fahrenheit (60°F), limit the as-applied VOC content of the fountain solution to 8.5% or less; or
 - c. Use fountain solution that contains no alcohol and limit the alcohol substitute content of the fountain solution to five percent (5%) by weight or less.
 - 3. The owner of a coldset web offset lithographic printing press with a fountain solution reservoir of at least one (1) gallon in capacity shall use a fountain solution that contains no alcohol and that has an alcohol substitute content of five percent (5%) by weight or less.

- B. An offset lithographic or letterpress printing facility is exempt from § 21.7.2(A) of this Part if one or a combination of the following circumstances apply:
 - 1. The press is used for book printing;
 - 2. The press has a maximum web width of twenty-two (22) inches or less;
 - 3. The press is operated with one or a combination of the following inks, coatings or varnishes:
 - a. Waterborne coatings;
 - b. Ultra-violet light or electron beam radiation cured materials;
 - c. Sheet-fed or non-heatset web inks; or
 - d. Sheet-fed or non-heatset web varnishes.
- C. The owner or operator of a heatset web offset lithographic printing press or heatset letterpress printing press with a web width of twenty-two (22) inches or more with the potential to emit at least twenty-five (25) tons per year of VOC (petroleum ink oil) emissions from all dryers, prior to controls, shall operate air pollution control equipment to:
 - 1. Achieve a ninety percent (90%) destruction efficiency if the air pollution control equipment is installed prior to January 1, 2019;
 - 2. Achieve a ninety-five (95%) destruction efficiency if the air pollution control equipment is installed on or after January 1, 2019; or
 - 3. Reduce the control device outlet concentration to twenty (20) parts per million as hexane on a dry basis if the inlet VOC concentration is so low that the control efficiency specified in §§ 21.7.2(C)(1) and (2) of this Part cannot be achieved.
- D. The owner or operator of an offset lithographic printing press or letterpress printing facility shall meet the following requirements for all cleaning solvents used at the facility:
 - 1. Cleaning solvents shall have a composite vapor pressure less than ten (10) mmHg at twenty degrees Celsius (20 °C);
 - 2. Cleaning solvents shall have a VOC content less than seventy percent (70%) by weight; or

- 3. No more than one hundred ten (110) gallons of cleaning solvent, not meeting the limits in §§ 21.7.2(D)(1) or (2) of this Part, shall be used in any 12-month period use.
- E. The owner or operator of an offset lithographic printing press or letterpress printing facility subject to this regulation shall comply with the work practice requirements in § 21.9 of this Part.

21.7.3 Flexible Package Printing on a Flexographic or Rotogravure Press

- A. The owner or operator of a flexographic or rotogravure press at a flexible package printing facility that has the potential to emit from the dryer, prior to controls, of at least twenty-five (25) tons per year of VOC from the use of inks, coatings and adhesives combined shall, in addition to complying with the work practice requirements in § 21.9 of this Part, use one of the following methods to control VOC emissions from such a press:
 - Use only individual inks, coatings and adhesives with an as-applied VOC content that does not exceed 0.8 kg VOC/kg of solids (0.8 lb VOC/lb of solids) or 0.16 kg VOC/kg of materials (0.16 lb VOC/lb of materials);
 - 2. Use only inks, coatings and adhesives so that the daily weighted average of the VOC content of the inks, coatings and adhesives used in a single printing line does not exceed 0.8 kg VOC/kg of solids (0.8 lb VOC/lb of solids) or 0.16 kg VOC/kg of materials (0.16 lb VOC/lb of materials); or
 - 3. Install, operate and maintain in accordance with the manufacturer's recommendations, a capture and a control device that produce the overall control efficiency for control equipment installed:
 - a. Prior to March 14, 1995 the overall efficiency must be greater than sixty-five percent (65%);
 - b. On or after March 14, 1995 the overall efficiency must be greater than eighty percent (80%).

21.8 Compliance Schedule

- A. The owner or operator of a rotogravure or flexographic printing facility subject to this regulation shall achieve compliance with the emission limitations in § 21.7.1 of this Part upon startup of within one year of becoming a potential fifty (50) ton per year VOC facility.
 - 1. The emission limitations of § 21.7.1 of this Part, may be relaxed subject to the following conditions:

- 2. The owner or operator of a facility documents to the satisfaction of the Director that such emission limitations cannot be met because neither coating reformulation(s) nor the installation of a control system is economically or technically feasible or even partially feasible, and
- 3. The facility shall provide the Director with the documentation no later than twelve (12) months after the effective date of this regulation and
- 4. The facility shall submit new emission limitations that will represent an Alternative Reasonably Available Control Technology (RACT) for approval by the Director. Alternative RACT shall also be submitted to EPA as a source-specific State Implementation Plan (SIP) revision. New emission limitations shall be achieved within two (2) years of submittal of a SIP revision to EPA; and
- 5. The Director shall require the facility to undergo RACT review every three (3) years thereafter until the emission limitations of § 21.7.1 of this Part, are achieved.
- B. The owner or operator of an offset lithographic or letterpress printing facility shall achieve compliance with the emission limitations in § 21.7.2 of this Part by January 1, 2020 or within one year of becoming an actual three (3) ton per year VOC facility.
- C. The owner or operator of a flexographic or rotogravure press at a flexible package printing facility printing facility shall achieve compliance with the emission limitations in § 21.7.3 of this Part by January 1, 2020 or within one year of becoming an actual three (3) ton per year VOC facility.
- D. The compliance schedule shall not allow a printing press to supersede any applicable emission limitations required by the Director but not limited to:
 - 1. Best Available Control Technology determinations, or
 - 2. Lowest Achievable Emissions Rate determinations, or
 - 3. Federal New Source Performance Standards, or
 - 4. National Emission Standards of Hazardous Air Pollutants, or
 - 5. Any other condition or standard that is specifically required by the Clean Air Act (as amended) for new or modified sources.

21.9 Work Practices

- A. The owner or operator of any rotogravure, flexographic, flexible package printing, offset lithographic or letterpress printing facility meeting the applicability requirements in § 21.6 of this Part shall implement the following work practices:
 - All new and used VOC-containing ink, fountain solution and cleaning solvent, including solvents mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use;
 - Spills and leaks of VOC-containing ink, fountain solution and cleaning solvent shall be minimized. Any leaked or spilled VOC-containing ink, fountain solution or cleaning solvent shall be absorbed and removed immediately;
 - 3. Absorbent applicators, such as cloth and paper, which are moistened with VOC containing ink, fountain solution or cleaning solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and
 - 4. VOC-containing ink, fountain solution and cleaning solvents shall be conveyed from one location to another in a closed container or pipe.

21.10 Compliance Demonstration/Testing

Compliance with applicable sections of this regulation shall be demonstrated in accordance with 40 C.F.R. § 60 Appendix A-7 Methods 24, 24A, 25, incorporated in § 21.4 of this Part or any other EPA approved method which has been accepted by the Director and EPA. A one-hour bake time must be used for 40 C.F.R. § 60 Appendix A-7 Methods 24 and 24A, incorporated in § 21.4 of this Part and, further, 40 C.F.R. § 60 Appendix A-7 Methods 24 and 24A, incorporated in § 21.4 of this Part, apply to multicomponent coatings.

21.11 Recordkeeping

21.11.1 Rotogravure and Flexographic Printing

- A. The facility shall maintain the following information at the facility at all times. This information shall be kept current and be made available to the DEM or EPA upon request.
 - 1. Printing coating press number.

- 2. Hours of operation per day or per year.
- 3. Method of application,
- 4. Number and types of inks coats applied to the substrate.
- 5. Drying method.
- 6. Substrate type.

B. For each ink coating:

- 1. Supplier name, ink coating name and Identification number
- 2. Ink Coating density (lb/gal).
- 3. Total volatile content of ink coating as supplied (vol %).
- 4. Water content of ink coating as supplied (wt%).
- 5. Exempt solvent content of ink coating as supplied (wt%).
- 6. Solids content of ink coating as supplied (wt%).
- 7. Name of diluent, if any.
- 8. Identification number of diluent.
- 9. Diluent solvent density (lb/gal).
- 10. VOC content of diluent (wt%).
- 11. Exempt solvent content of diluent (wt%).
- 12. Diluent/coating ratio (gal diluent/gal coating).
- 13. The facility should maintain §§ 21.11(B)(8) through (12) of this Part, for any diluent and solvents used for cleanup operations.
- C. The facility shall keep the following records on site for each printing coating press on a daily basis:
 - 1. Printing coating press number.
 - 2. Time period.
 - 3. Ink Coating identification number.

- 4. Amount of ink coating used (gallons).
- 5. Diluent identification number.
- 6. Amount of diluent used (gallons).
- 7. The facility shall also maintain §§ 21.11(C)(5) and (6) of this Part, for clean-up operations.
- D. All record and reports must be maintained by the facility for no less than five (5) years.
- E. Additional recordkeeping and reporting for facilities with add-on control:
 - 1. The facility shall maintain the following information at all times. This information shall be kept current and be made available to the DEM and EPA upon request.
 - a. Control device identification number and model number.
 - b. Manufacturer.
 - c. Installation date.
 - d. Printing press(es) controlled.
 - e. Whether or not the control device is always in operation when the press(es) it is serving is in operation.
 - f. Type of control device.
 - g. Destruction or removal efficiency.
 - h. Date tested (If not tested, method of determining destruction efficiency).
 - i. For thermal incinerators-design combustion temperature (°F).
 - j. For catalytic incinerators- design exhaust gas temperature (°F), design temperature rise across catalyst bed (°F), anticipated frequency of catalyst change, and catalyst changes.
 - k. For a condenser-design inlet temperature of cooling medium (°F), design exhaust gas temperature (°F).
 - I. For a carbon adsorber-design pressure drop across the adsorber, VOC concentration at breakthrough.

- m. Emission test results-inlet VOC concentration (ppm), outlet VOC concentration (ppm), method of concentration determination, date of determination.
- n. Type and location of capture system.
- o. Capture efficiency (%).
- p. Method of determining capture efficiency.
- 2. The facility shall continuously monitor and record at least the following parameters:
 - a. For thermal incinerators exhaust gas temperature (°F).
 - b. For catalytic incinerators exhaust gas temperature (°F), temperature rise across the catalyst bed (°F).
 - c. For condensers inlet temperature of cooling medium (°F), exhaust gas temperature (°F).
 - d. For carbon adsorbers pressure drop across the adsorber, hydrocarbon levels for breakthrough.

21.11.2 Offset Lithographic and Letterpress Printing

- A. The facility shall maintain the following information at the facility at all times. This information shall be kept current and be made available to the DEM or EPA upon request:
 - 1. Monthly records of all cleaning solvents, fountain solution additives or inks used, as follows:
 - a. Name and description of each cleaning solvent, fountain solution additive or ink;
 - b. VOC content of each cleaning solvent, fountain solution additive or ink, as-applied, and the associated calculations;
 - c. VOC content of each cleaning solvent, fountain solution additive or ink, as supplied;
 - d. The amount of each cleaning solvent, fountain solution additive or ink;

- e. A Safety Data Sheet for each cleaning solvent, fountain solution additive or ink;
- f. Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the Director; and
- g. Date and type of maintenance performed on air pollution control equipment, if applicable.
- B. The owner or operator of any offset lithographic or letterpress printing facility whose actual emissions before controls are less than or equal to three (3) tons of VOC for any consecutive 12-month period calendar year shall maintain materials purchase or use records sufficient to verify they are not subject to this Part.

21.11.3 Flexible Package Printing on a Flexographic or Rotogravure Press

- A. The facility shall maintain the following information at the facility at all times. This information shall be kept current and be made available to the DEM or EPA upon request:
 - 1. Monthly records of all inks, coatings, adhesives or cleaning solvents used, as follows:
 - Name and description of each ink, coating, adhesive or cleaning solvent;
 - b. VOC content of each ink, coating, adhesive or cleaning solvent, asapplied, and the associated calculations;
 - c. VOC content of each ink, coating, adhesive or cleaning solvent, as supplied;
 - d. The amount of each ink, coating, adhesive or cleaning solvent;
 - e. A Safety Data Sheet for each ink, coating, adhesive or cleaning solvent;
 - f. Documentation of control device efficiency and capture efficiency, if applicable, using an applicable EPA reference method or alternate method as approved by the Director; and
 - g. Date and type of maintenance performed on air pollution control equipment, if applicable.

B. The owner or operator of any flexographic or rotogravure press at a flexible package printing facility whose actual emissions before controls are less than or equal to three (3) tons of VOC for any consecutive 12-month period calendar year shall maintain materials purchase or use records sufficient to verify they are not subject to this Part.

250-RICR-120-05-21

TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT CHAPTER 120 - AIR RESOURCES

SUBCHAPTER 05 - AIR POLLUTION CONTROL

PART 21 - AIR POLLUTION CONTROL REGULATION NO. 21- CONTROL OF VOLATILE ORGANIC COMPOUND EMISSIONS FROM PRINTING OPERATIONS

VOLATILE ORGANIC COMPOUND EMISSIONS FROM PRINTING OPERATIONS

Type of Filing: Amendment

Agency Signature

Agency Head Signature Agency Signing Date

Department of State

Regulation Effective Date

Department of State Initials Department of State Date