

16.0 Paper, Film, and Foil Coating
(2010 revision, draft 1)

04/11/1993 mm/dd/2010

16.1 Applicability

16.1.1 The provisions of 16.0 of this regulation apply to any paper, film, or foil coating unit.

16.1.2 The provisions of 16.0 of this regulation do not apply to any paper, film, or foil coating unit within a facility whose actual emissions (including related cleaning activities) without control devices from all paper, film, and foil coating units within the facility are less than 6.8 kilograms (kg) (15 pounds [lb]) of volatile organic compounds (VOCs) per day.

16.1.3 An owner or operator of a facility whose emissions are below the applicability threshold in 16.1.2 of this regulation shall comply with the certification, recordkeeping, and reporting requirements of 16.7.1 of this regulation.

16.1.4 Any facility that becomes or is currently subject to the provisions of 16.0 of this regulation by exceeding the applicability threshold in 16.1.2 of this regulation will remain subject to these provisions even if its emissions later fall below the applicability threshold.

16.1.5 Any facility that is currently subject to a state or federal rule promulgated pursuant to the Clean Air Act Amendments of 1977 by exceeding an applicability threshold is and will remain subject to these provisions, even if its throughput or emissions have fallen or later fall below the applicability threshold.

16.1.6 The provisions of 16.0 of this regulation does not apply to any coating unit in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing operation. Such coating units may be subject to 37.0 or 47.0 of this regulation, whichever is applicable.

16.1.7 Transition period for existing permitted sources. Every owner or operator of any paper coating unit that is subject to a permit issued pursuant to 7 DE Admin Code 1102 or 1130 containing all applicable conditions of 16.0 of this regulation, as that regulation existed on January 11, 1993, shall comply with those permit conditions until December 31, 2010. On and after January 1, 2011, every such owner or operator of any paper coating unit shall comply with the provisions of 16.0 of this regulation.

16.2 Definitions. As used in 16.0 of this regulation, all terms not defined herein shall have the meanings given them in the November 15, 1990 Clean Air Act Amendments (CAAA), or in 2.0 of this regulation.

“Coating” means a material being applied, or an action of applying such a material, onto or impregnated into a substrate for decorative, protective, or functional purpose.

“Paper, film, or foil coating line” means a series of coating applicators, flash-off areas, and any associated curing/drying equipment between one or more unwind/feed stations and one or more rewind/cutting stations to apply a coating onto a continuous strip of substrate (a web). ~~a web coating line where coating is applied to paper, film, or foil.~~ Printing presses are not considered ~~paper~~ coating lines. Products produced on a paper, film, or foil coating line include, but are not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tapes and labels. ~~Paper e~~Coating lines include, but are not limited to, application by impregnation or saturation or by the use of roll,

knife, or rotogravure coating. A paper coating line may include more than one paper coating units.

“Paper, film, or foil coating unit” means ~~a coating application station and its associated flash-off area, drying area, or oven wherein coating is applied and dried or cured on a paper coating line. A paper coating line may include more than one paper coating unit.~~ any coating unit applying a coating to paper, film, or foil substrates used in the manufacturing of several major product types for the following industry sectors: pressure sensitive tape and labels (including fabric coated for use in pressure sensitive tapes and labels); photographic film; industrial and decorative laminates; abrasive products (including fabric coated for use in abrasive products) and flexible packaging (including coating of non-woven polymer substrates for use in flexible packaging). Paper, film, or foil coating unit also includes a coating unit applying a coating during miscellaneous coating operations for several products including: corrugated and solid fiber boxes; die-cut paper paperboard, and cardboard; converted paper and paperboard not elsewhere classified; folding paperboard boxes, including sanitary boxes; manifold business forms and related products; plastic aseptic packaging; and carbon paper and inked ribbons.

16.3 Standards. No owner or operator of any paper, film, or foil coating unit shall operate the coating unit unless the owner or operator meets the applicable requirements listed under 16.3.1, 16.3.2, 16.3.3, and 16.3.4 of this regulation.

16.3.1 Except as specified in 16.3.2 of this regulation, ~~No no owner or operator of a papercoating unit subject to 16.0 of this regulation shall cause, allow, or permit the application of any coating on that unit with VOC content in excess of 0.35 kilograms per liter (kg/L) (2.9 pounds per gallon [lb/gal]) of coating, excluding water and exempt compounds, as applied 0.40 kilogram VOC per kilogram of solid applied (kg/kg) (0.40 pound of VOC per pound of solid [lb/lb]).~~

16.3.2 For pressure sensitive tape and label surface coating, no application of any coating on that unit with VOC content in excess of 0.20 kilogram VOC per kilogram of solid applied (kg/kg) (0.20 pound of VOC per pound of solid [lb/lb]).

16.3.23 As an alternative to compliance with the emission limit in 16.3.1 or 16.3.2 of this regulation, an owner or operator of a paper, film, or foil coating unit ~~subject to 16.0 of this regulation~~ may meet the requirements of 16.4 or 16.5 of this regulation.

16.3.4 When handling cleaning materials, an owner or operator of a paper, film, or foil coating unit shall comply with 8.0 of this regulation.

16.4 Daily-weighted average limitation. No owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation shall apply, during any day, coatings on that unit whose daily-weighted average VOC content, calculated in accordance with the procedure specified in Appendix C of this regulation, exceeds the emission limit in 16.3.1 or 16.3.2 of this regulation, whichever is applicable.

16.5 Control devices

16.5.1 An owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation may comply with 16.0 of this regulation by:

16.5.1.1 Installing and operating a capture system on that unit.

16.5.1.2 Installing and operating a control device on that unit.

- 16.5.1.3 Determining for each day the overall emission reduction efficiency needed to demonstrate compliance. The overall emission reduction needed for a day is the lesser of the value calculated according to the procedure in 3.0 of Appendix C of this regulation for that day or 95%. If the calculated efficiency is less than 90%, use 90% as the needed efficiency.
- 16.5.1.4 Demonstrating each day that the overall emission reduction efficiency achieved for that day, as determined in 3.0 of Appendix D of this regulation, is greater than or equal to the overall emission reduction efficiency ~~required~~ needed for that day as determined in 16.5.1.3 of this regulation.
- 16.5.2 An owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation shall ensure that:
- 16.5.2.1 A capture system and control device are operated at all times the coating unit is in operation, and the owner or operator demonstrates compliance with 16.0 of this regulation through the applicable coating analysis and capture system and control device efficiency test methods specified in Appendix B, Appendix D and Appendix E of this regulation and in accordance with the capture efficiency test methods in Appendix D of this regulation.
- 16.5.2.2 The control device is equipped with the applicable monitoring equipment specified in 2.0 of Appendix D of this regulation, and the monitoring equipment is installed, calibrated, operated, and maintained according to the vendor's specifications at all times the control device is in use.
- 16.6 Test methods. The test methods found in Appendix A through Appendix D of this regulation shall be used to determine compliance with 16.0 of this regulation.
- 16.7 Recordkeeping and reporting
- 16.7.1 An owner or operator of a paper, film, or foil coating unit that is exempt from the emission limitations in 16.3 of this regulation shall comply with the certification requirements in 4.2 of this regulation within six months after [insert the effective date of this revision of 16.0], and with the recordkeeping, and reporting requirements in 4.2 of this regulation on and after [insert the effective date of this revision of 16.0].
- 16.7.2 An owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation and complying with 16.3 of this regulation by the use of complying coatings shall comply with the certification requirements in 4.3 of this regulation within six months after [insert the effective date of this revision of 16.0], and with the recordkeeping, and reporting requirements in 4.3 of this regulation on and after [insert the effective date of this revision of 16.0].
- 16.7.3 An owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation and complying with 16.4 of this regulation by daily-weighted averaging shall comply with the certification, recordkeeping, and reporting requirements in 4.4 of this regulation.
- 16.7.4 An owner or operator of a paper, film, or foil coating unit subject to 16.0 of this regulation and complying with 16.5 of this regulation by the use of control devices shall comply with the testing requirements in 4.5 of this regulation within six months after [insert the effective date of this revision of 16.0], and with the reporting, and recordkeeping requirements in 4.5 of this regulation on and after [insert the effective date of this revision of 16.0].