401 KAR 61:120. Existing fabric, vinyl and paper surface coating operations.

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120, 40 C.F.R. 60 Appendix A (Method 24), 42 U.S.C. 7401 et seq., 7407, 7408, 7410

STATUTORY AUTHORITY: KRS 224.10-100

CERTIFICATION STATEMENT:

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. 42 USC 7410 likewise requires the state to implement standards for national primary and secondary ambient air quality. This administrative regulation provides for the control of volatile organic compound emissions from existing fabric, vinyl or paper surface coating operations.

Section 1. Definitions. As used in this administrative regulation, all terms not defined in this section shall have the meaning given to them in 401 KAR 61:001.

(1) "Affected facility" means a coating line for fabric, vinyl, or paper.

(2) "Applicator" means the mechanism or device used to apply the coating including, but not limited to, roll, knife, or rotogravure coater.

(3) "Flash-off area" means the space between the applicator and the oven.

(4) "Coating line" means a series of equipment or operations used to apply, dry, or cure any coatings containing volatile organic compounds (VOCs). This shall include, but is not limited to:

(a) Mixing operations;

(b) Process storage;

(c) Applicators;

(d) Drying operations including, but not limited to, flash-off area evaporation, oven drying, baking, curing, and polymerization;

(e) Clean up operations;

(f) Leaks, spills and disposal of VOCs;

(g) Processing and handling of recovered VOCs;

(h) For the purpose of determining compliance with this administrative regulation, if any equipment or operation is considered to be a part of more than one (1) coating line, its VOC emissions shall be assigned to each coating line to which it is a part proportionally to the throughput of VOCs it receives from or distributes to each coating line;

(i) If any portion of the series of equipment or operations qualifies for an exemption according to Section 6 of this administrative regulation, then that portion shall be considered to be a separate coating line.

(j) An affected facility which is capable of performing both paper coating and paper printing shall be considered as performing a paper printing operation subject to 401 KAR 61:122.

(5) "Process storage" means mixing tanks, holding tanks, and other tanks, drums, or other containers which contain surface coatings, VOCs, or recovered VOCs; but does not mean storage tanks of petroleum liquids which are subject to 401 KAR 59:050, 401 KAR 59:052, or 401 KAR 61:050.

(6) "Fabric coating" means the coating or saturation of a textile substrate to impart properties that are not initially present, such as strength, stability, water or acid repellency, functionality, or appearance.

(7) "Vinyl coating" means the coating of vinyl coated fabric or vinyl sheets, which includes decorative, functional, or protective topcoats or printing.

(8) "Paper coating" means saturation or the application of a uniform layer of material across the entire width of a web of paper, pressure sensitive tapes regardless of substrate,

related web coating processes on plastic film such as typewriter ribbons, photographic film, magnetic tape, functional films, and decorative coatings on metal foil such as gift wrap and packaging, but does not include the printing of paper.

(9) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate.

(10) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

(11) "Rotogravure coating" means the application of a uniform layer of material across a substrate by means of a roll coating technique in which the entire coating roll is uniformly etched with recessed cells and no pattern or design is present. The coating material is picked up in these recessed cells and is transferred to the substrate.

(12) "Classification date" means June 29, 1979.

(13) "VOCs net input" means the total amount of VOCs input to the affected facility minus the amount of VOCs that are not emitted into the atmosphere. VOCs that are prevented from being emitted to the atmosphere by the use of control devices shall not be subtracted from the total for the purposes of determining VOCs net input. If the nature of any operation or design of equipment is such as to permit more than one (1) interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

(14) "Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage. It applies to flexographic and rotogravure processes as applied to publication, specialty, and packaging printing as defined in 401 KAR 61:122.

Section 2. Applicability. (1) This administrative regulation shall apply to each affected facility commenced before the classification date defined in Section 1 of this administrative regulation which is located in a county or portion of a county which is designated ozone nonattainment, for any nonattainment classification except marginal, under 401 KAR 51:010.

Section 3. Standard for VOCs. No person shall cause, allow, or permit an affected facility to discharge into the atmosphere more than fifteen (15) percent by weight of the VOCs net input into the affected facility.

Section 4. Compliance.

(1) In all cases the design of any control system shall be subject to approval by the cabinet.

(2) Compliance with the standard in Section 3 of this administrative regulation shall be demonstrated by a material balance unless the cabinet determines that a material balance is not possible. If a material balance is not possible, compliance shall be determined based upon an engineering analysis by the cabinet of the control system design, control device efficiency, control system capture efficiency, and any other factors that may influence the performance of the system. If requested by the cabinet, performance tests specified by the cabinet shall be conducted to determine the efficiency of the control device. Capture efficiency shall be determined by procedures specified in 401 KAR 50:047.

(3) With the prior approval of the cabinet, the owner or operator may elect to effect all changes necessary to qualify for an exemption under Section 6 of this administrative regulation.

(4) If deemed necessary by the cabinet, the cabinet shall obtain samples of the coatings used at an affected facility to verify that the coatings meet the requirements in Section 6 of this administrative regulation. Appendix A to 40 CFR 60, Method 24, which has been

incorporated by reference in 401 KAR 50:015, shall be used as applicable to determine compliance of the coatings unless the cabinet determines that other methods would be more appropriate. Case-by-case alternatives approved by the cabinet, but not previously authorized by the U.S. EPA, shall be submitted to the U.S. EPA as a SIP revision.

(5) Compliance on one (1) coating line with VOC emission limits shall be based on an averaging period not to exceed twenty-four (24) hours. If it is not economically or technically feasible to determine emissions on a daily basis, alternatives expressing emission limits for longer averaging times may be accepted if approved by the cabinet. Case-by-case alternatives approved by the cabinet, but not previously authorized by the U.S. EPA, shall be submitted to the U.S. EPA as a SIP revision.

(6) The amount of exempt solvents shall be subtracted from the amount of coatings, just like water, with the ultimate value of interest being the mass of VOC per unit volume of coating less exempt solvent or water or both.

(7) Calculations to determine equivalency on one (1) coating line shall be based on mass of VOC per volume of solids. Vinyl plastisols and organisols shall not be included in VOC equivalency calculations that are required to be included in applications for VOC bubbles.

(8) Daily records shall be maintained by the source for the most recent two (2) year period. These records shall be made available to the cabinet or the U.S. EPA upon request. The records shall include, but not be limited to, the following:

(a) Applicable administrative regulation number;

(b) Application method and substrate type;

(c) Amount and type of adhesive, coating (including catalyst and reducer for multicomponent coatings), or solvent used at each point of application, including exempt compounds;

(d) The VOC content as applied in each adhesive, coating, or solvent;

(e) The date for each application for adhesive, coating, or solvent;

(f) The amount of surface preparation, cleanup, or washup solvent (including exempt compounds) used and the VOC content of each; and

(g) Oven temperature, if applicable.

Section 5. Compliance Timetable.

(1) Affected facilities which were subject to this administrative regulation as in effect on June 29, 1979, shall have achieved final compliance by December 1, 1981.

(2) The owner or operator of an affected facility that becomes subject to this administrative regulation on or after June 24, 1992 shall be required to complete the following:

(a) A final control plan for achieving compliance with this administrative regulation shall be submitted no later than nine (9) months after the date the affected facility becomes subject to this administrative regulation.

(b) The control system contract or the exempt coatings and any accompanying process change contracts shall be awarded no later than eleven (11) months after the affected facility becomes subject to this administrative regulation.

(c) On-site construction or installation of emission control equipment or process changes for exempt coatings shall be initiated no later than thirteen (13) months after the affected facility becomes subject to this administrative regulation.

(d) On-site construction or installation of emission control equipment or process changes for exempt coatings shall be completed no later than seventeen (17) months after the affected facility becomes subject to this administrative regulation.

(e) Final compliance shall be achieved no later than eighteen (18) months after the affected facility becomes subject to this administrative regulation.

(f) If an affected facility becomes subject to this administrative regulation because it is located in a county previously designated nonurban nonattainment or redesignated in 401 KAR 51:010 after November 15, 1990, final compliance may be extended to May 31, 1995, and the schedule in paragraphs (a) through (d) of this subsection adjusted by the cabinet.

Section 6. Exemptions.

(1) Any affected facility coating fabric or paper shall be exempt from Section 3 of this administrative regulation if the VOC content of the coating is less than 0.35 kg/l of coating (two and nine-tenths (2.9) lb/gal), excluding water or exempt solvent or both, delivered to the applicators associated with the coating line.

(2) Any affected facility coating vinyl shall be exempt from Section 3 of this administrative regulation if the VOC content of the coating is less than 0.45 kg/l of coating (three and eight-tenths (3.8) lb/gal) excluding water or exempt solvent or both, delivered to the applicators associated with the coating line.

(3) An affected facility shall be exempt from this administrative regulation if the total VOC emissions from all affected facilities subject to this administrative regulation are less than or equal to:

(a) Three (3) lb/hr actual emissions before add-on control;

(b) Fifteen (15) lb/day actual emissions before add-on control; or

(c) Ten (10) tons per year theoretical potential emissions based on design capacity for maximum production) and 8760 hr/yr before add-on control.

(4) Low-use coatings shall be exempt from Section 3 of this administrative regulation if the plantwide consumption of these coatings in the aggregate is less than or equal to fifty-five (55) gallons during the previous twelve (12) months.

(5 Ky.R. 501; 6 Ky.R. 45; eff. 6-29-1979; 8 Ky.R. 913; eff. 9-22-1982; 18 Ky.R. 2658; 3367; eff. 6-24-1992; TAm eff. 8-9-2007; Crt eff. 1-25-2019; TAm eff. 2-14-2019; Crt eff. 1-20-2026.)