401 KAR 61:125. Existing can 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

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 can 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 cans.

(2) "Applicator" means the mechanism or device used to apply the coating, including but not limited to spray or roller.

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

(4) "End sealing compound" means a synthetic rubber compound which is coated onto can ends and functions as a gasket when the end is assembled on the can.

(5) "Exterior base coating" means a coating applied to the exterior of a can to provide exterior protection to the metal and background for the lithographic or printing operation.(6) "Interior base coating" means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product.

(7) "Interior body spray" means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

(8) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

(9) "Three (3) piece can side-seam spray" means a coating sprayed on the exterior and interior of a welded, cemented or soldered seam to protect the exposed metal.

(10) "Two (2) piece can exterior end coating" means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

(11) "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 purposes 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 of 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.

(12) "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.

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

(14) "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 permits more than one (1) interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

Section 2. Applicability. 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 so requested by the cabinet, performance tests as specified by the cabinet shall be conducted in order 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 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 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 shall be based on mass of VOC per volume of solids.

(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 August 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 date 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 date 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 date the affected facility becomes subject to this administrative regulation.

(e) Final compliance shall be achieved no later than eighteen (18) months after the date 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. Any affected facility shall be exempt from Section 3 of this administrative regulation if the VOC content of the coating is:

(1) Less than 0.34 kg/l of coating (two and eight-tenths (2.8) lb/gal), excluding water, or exempt solvent or both, delivered to the applicators associated with the sheet base coat (exterior and interior) and overvarnish or two (2) piece can exterior (basecoat and overvarnish) coating lines;

(2) Less than 0.51 kg/l of coating (four and two-tenths (4.2) lb/gal), excluding water, or exempt solvent or both, delivered to the applicators associated with the two (2) and three (3) piece can interior body spray or two (2) piece can exterior end (spray or roll coat) coating lines;

(3) Less than 0.66 kg/l of coating (five and five-tenths (5.5) lb/gal), excluding water, or exempt solvent or both, delivered to the applicators associated with the three (3) piece can side-seam spray coating line;

(4) Less than 0.44 kg/l of coating (three and seven-tenths (3.7) lb/gal), excluding water, or exempt solvent or both, delivered to the applicators associated with the end sealing compound coating line.

(5) 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.

(6) 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. 502; 6 Ky.R. 47; eff. 6-29-1979; 18 Ky.R. 2667; 3372; eff. 6-24-1992; TAm eff. 8-9-2007; Crt eff. 1-25-2019; TAm eff. 2-14-2019.)