



DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Air Quality Control Commission

REGULATION NUMBER 7

CONTROL OF OZONE VIA OZONE PRECURSORS AND CONTROL OF HYDROCARBONS VIA OIL AND GAS EMISSIONS (EMISSIONS OF VOLATILE ORGANIC COMPOUNDS AND NITROGEN OXIDES)

5 CCR 1001-9

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

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**PART C Surface Coating, Solvents, Asphalt, Graphic Arts and Printing, and
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I. Surface Coating Operations

I.A. General Provisions

I.A.1. Definitions, unless otherwise specified in Sections I.B. through I.O.

I.A.1.a. "Coating" means a protective, functional or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels, but is also used to refer to films applied to paper, plastics, or foils.

I.A.1.b. "Coating Applicator" means an apparatus used to apply a surface coating.

I.A.1.c. "Coating Line" means an operation which includes both (1) a coating applicator and (2) device(s) and/or area(s) to accomplish one or more of the following processes: flash-off, drying, curing, heat-setting and/or polymerization.

I.A.1.d. "Coating Solids" means that portion of a surface coating, which remains after volatile components have escaped.

I.A.1.e. "Final Repair Application" means that application of surface coating specifically intended to repair damage and imperfections in existing surface coats.

I.A.1.f. "Finished Coating Solids" means those coating-solids that remain on a coated substance after completion of all production processes.

I.A.1.g. "Flash-off Area" means the space between the application area and the oven.

I.A.1.h. "Prime Coat" (also termed "primer") means the first film of coating applied in a multiple-coat operation.

I.A.1.i. "Single Coat" means a single film of coating applied directly to the metal substrate, omitting the primer application.

I.A.1.j. "Surface Coating" means a liquid, liquefiable, or mastic composition which is converted to a solid (or semi-solid) protective, decorative, or adherent film or deposit after application as a thin layer or by impregnation.

In a machine which has both coating and printing units, all units shall be considered as performing a printing operation. Such a machine is subject to the standards governing graphic arts, and thus is not covered by coating standards.

I.A.1.k. "Surface Coating Oven" means a chamber within which heat is used to bake, cure, polymerize, and/or dry a surface coating.

I.A.1.l. "Topcoat" means the final film of coating applied in a multiple-coat operation.

I.A.2. Abbreviations

I.A.2.a. Kg/lc shall be the abbreviation for: kilograms of solvent VOC per liter of coating (minus water and "exempt" solvents, as defined in Part A, Section II.B.).

<p>I.N.4.a. Substitute water-based sprays for the normal solvent-based mold release compound; or,</p> <p>I.N.4.a.(i) Install a capture system designed and operated in a manner that will capture and transfer at least 90.0 percent of the VOC emitted by the green tire spraying operation to a control device; and,</p> <p>I.N.4.a.(ii) In addition to Section I.N.4.a.(i), install and operate a control device that meets the requirements of one of the following:</p> <p>I.N.4.a.(ii)(A) a carbon adsorption system designed and operated in a manner such that there is at least 95.0 percent removal of VOC by weight from the gases ducted to the control device; or,</p> <p>I.N.4.a.(ii)(B) an incineration system that oxidizes at least 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) to carbon dioxide and water.</p> <p>I.N.5. Testing of capture system efficiency shall meet the requirements of Section I.A.5.e.</p> <p>I.N.6. Control devices shall meet the applicable requirements, including recordkeeping, of Sections I.A.3.a., b., c., and e., and I.A.8.a. and b.</p> <p>I.N.7. The applicable EPA reference methods 1 through 4, and 25, of 40 CFR Part 60 (September 14, 1989), shall be used to determine the efficiency of control devices.</p>
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I.O. Wood Products Coating

<p>I.O.1. Definitions</p> <p>I.O.1.a. "As Applied" means the VOC and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.</p> <p>I.O.1.b. "Cleaning Operation" means operations in which organic solvent is used to remove coating materials from equipment used in wood furniture manufacturing operations.</p> <p>I.O.1.c. "Conventional Air Spray" means a spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless and air assisted spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workplace.</p> <p>I.O.1.d. "Equipment Leak" means emissions of VOCs from pumps, valves, flanges, or other equipment used to transfer or apply finishing materials or organic solvents.</p> <p>I.O.1.e. "Finishing Material" means a coating used in the wood furniture industry including, but not limited to, basecoats, stains, washcoats, sealers, and topcoats.</p>
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- I.O.1.f. "Finishing Operation" means those activities in which a finishing material, including, but not limited to, basecoats, stains, washcoats, sealers, and topcoats, is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.
- I.O.1.g. "Organic Solvent" means a liquid containing VOCs that is used for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, cleaning, or washoff. When used in a coating, the organic solvent evaporates during drying and does not become part of the dried film.
- I.O.1.h. "Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Washcoats, which are used in some finishing systems to optimize aesthetics, are not sealers.
- I.O.1.i. "Strippable Booth Coating" means a coating that is applied to a booth wall to provide a protective film to receive overspray during finishing operations that is subsequently peeled off and disposed, and reduces or eliminates the need to use organic solvents to clean booth walls.
- I.O.1.j. "Topcoat" means the last film-building finishing material applied in a finishing system. Non-permanent final finishes are not topcoats.
- I.O.1.k. "Washcoat" means a transparent special purpose coating that has a solids content by weight of 12 percent or less. Washcoats are applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.
- I.O.1.l. "Washoff Operation" means those operations in which organic solvent is used to remove coating from a substrate.
- I.O.1.m. "Wood Furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineer wood product such as particleboard.
- I.O.1.n. "Wood Furniture Component" means any part that is used in the manufacture of wood furniture including, but not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops.
- I.O.1.o. "Wood Furniture Manufacturing Operation" means the finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

I.O.2. Applicability

~~This section applies to wood furniture manufacturing operations with uncontrolled actual VOC emissions greater than or equal to 25 tons per calendar year.~~

Beginning July 1, 2021, this section applies to other wood products coating operations with uncontrolled actual VOC emissions greater than or equal to 50 tons per year (as of January 27, 2020, located in the 8-Hour Ozone Control Area).

I.O.3. Emission Limitations

- ~~I.O.3.a. The owner or operator of a wood furniture manufacturing or other wood products coating operation must limit VOC emissions from finishing operations by:~~

- I.O.3.a.(i) Using topcoats with a VOC content equal to or less than 0.8 lb VOC/lb solids (0.8 kg VOC/kg solids); or
- I.O.3.a.(ii) Using a finishing system of:
 - I.O.3.a.(ii)(A) Sealers with a VOC content equal to or less than 1.9 lb VOC/lb solids (1.9 kg VOC/kg solids), as applied; and
 - I.O.3.a.(ii)(B) Topcoats with a VOC content equal to or less than 1.8 lb VOC/lb solids (1.8 kg VOC/kg solids), as applied; or
- I.O.3.a.(iii) For sources using acid-cured alkyd amino vinyl sealers or acid-cured alkyd amino conversion varnish topcoats:
 - I.O.3.a.(iii)(A) Use acid-cured alkyd amino vinyl sealers with a VOC content equal to or less than 2.3 lb VOC/lb solids (2.3 kg VOC/kg solids), as applied, and an acid-cured alkyd amino conversion varnish topcoat with a VOC content equal to or less than 2.0 lb VOC/lb solids (2.0 kg VOC/kg solids), as applied; or
 - I.O.3.a.(iii)(B) Use acid-cured alkyd amino conversion varnish topcoat with a VOC content equal to or less than 2.0 lb VOC/lb solids (2.0 kg VOC/kg solids), as applied, and sealers with a VOC content equal to or less than 1.9 lb VOC/lb solids (1.9 kg VOC/kg solids); or
 - I.O.3.a.(iii)(C) Use acid-cured alkyd amino vinyl sealers with a VOC content equal to or less than 2.3 lb VOC/lb solids (2.3 kg VOC/kg solids), as applied, and topcoats with a VOC content equal to or less than 1.8 lb VOC/lb solids (1.8 kg VOC/kg solids), as applied.

I.O.3.b. The owner or operator of a wood furniture manufacturing or other wood products coating operation must use strippable booth coatings with a VOC content equal to or less than 0.8 lb VOC/lb solids (0.8 kg VOC/kg solids), as applied.

I.O.3.c. The owner or operator of a wood furniture manufacturing or other wood products coating operation must use compounds containing equal to or less than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, and/or metal filters, unless the spray booth is being refurbished. If the spray booth is refurbished (i.e., spray booth coating or other material used to cover the booth is being replaced), the owner or operator must use equal to or less than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.

I.O.4. Work Practices

I.O.4.a. In addition to complying with Sections I.A.7. and I.A.9., the owner or operator of a wood furniture manufacturing or other wood products coating operation must:

- I.O.4.a.(i) Develop an operator training program that includes, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes;