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(Amended[DATE OF RULE ADOPTION])
Revision Date 12/5/2025

[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]

PROPOSED AMENDED RULE 1136. - WOOD PRODUCTS COATINGS

(a) Purpose ~~and Applicability~~

The purpose of Rule 1136 is to reduce ~~volatile organic compounds~~ Volatile Organic Compounds (VOCs) and toxic emissions from the application of ~~coating~~Coatings or ~~strippers~~Strippers to, and surface preparation of, any ~~wood products~~Wood Products~~, including furniture, cabinets, shutters, frames and toys~~. ~~This rule shall not apply to residential noncommercial operations.~~

(b) Applicability

This rule is applicable to any Person who supplies, sells, offers for sale, markets, manufactures, blends, packages, repackages, possesses, or distributes any Wood Products Coating, Wood Products Coating component, or associated solvent for use within the South Coast AQMD, as well as any owner or operator of a Facility who uses, applies, or solicits the use or application of any Wood Coating Materials, Strippers, or associated solvents within the South Coast AQMD. This rule shall not apply to residential non-commercial operations.

(~~b~~c) Definitions

~~For the purposes of this rule, the following definitions shall apply:~~

(1) AEROSOL COATING PRODUCT means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application.

(2) AIR POLLUTION CONTROL SYSTEM is combination of an enclosed space capable to capturing emissions, and an air pollution control device, which is equipment installed to reduce VOC emissions, installed to collect and reduce emissions from the exhaust stream of any spray booth, curing oven, or application area.

(~~2~~3) BARRIER COAT - PLASTIC COMPONENTS is a ~~coating~~Coating applied to simulated wood components made from polypropylene, polystyrene, polyester, polyurethane, and other plastics to improve adhesion of waterborne ~~coatings~~Coatings.

(~~3~~4) BINDERS are non-volatile polymeric organic materials (resins) which form the surface film in ~~coating~~Coating applications.

(~~4~~5) CAPTURE EFFICIENCY, in percent, is the ratio of the weight of the VOC in the effluent stream entering the control device to the weight of VOC emitted from wood product ~~coating~~Coating operations, both measured simultaneously, and can be calculated by the following equation:

Capture Efficiency = [Wc/We] x 100

Where: Wc = weight of VOC entering control device

We = weight of VOC emitted

~~(5) CLASSIC GUITARS are replicas of guitars that were originally manufactured before 1965 and are manufactured by the same original processes.~~

~~(6) CLEAR SEALER is a coating containing binders, but not opaque pigments, which seals the wood product prior to application of the subsequent coatings.~~

(6) CLEAR PRIMERS, SEALERS, AND UNDERCOATS are Coatings containing binders, but not opaque pigments, which seals the Wood Product prior to application of the subsequent Coatings.

(7) CLEAR TOPCOAT is a final ~~coating~~Coating which contains ~~binders~~Binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

(8) COATING is a material which is applied to a surface ~~and which forms a film in order~~ to beautify, ~~and/or~~ protect, or provide a barrier to such surface.

(9) COMPOSITE WOOD is a manufactured material consisting of tightly compressed wood fibers bonded with resins which includes, but is not limited to, particleboard, fiberboard and hardboard.

(10) COMPOSITE WOOD EDGE FILLER is a material which is applied to the edge of a ~~composite wood~~ Composite Wood product, and whose primary function is to build up, or fill the voids and imperfections on the edge of the ~~composite wood~~ Composite Wood product.

(11) CONTROL DEVICE EFFICIENCY, in percent, is the ratio of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously, and can be calculated by the following equation:

Control Device Efficiency = [(Wc-Wa)/Wc] x 100
Where: Wc = weight of VOC entering control device
Wa = weight of VOC discharged from the control device

(12) CONVENTIONAL AIR SPRAY means a spray ~~coating~~Coating method in which the ~~coating~~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 and does not include~~.~~ ~~Airless~~ airless and air assisted airless spray technologies or ~~are not conventional air spray because the coating is not atomized by mixing it with compressed air.~~ Eelectrostatic spray technology~~ is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece~~.

~~(13) CUSTOM REPLICA FURNITURE is new, made-to-order furniture that looks like antique furniture, rather than new furniture. It features detailed wood carvings and bruising of the wood to simulate antique furniture.~~

(~~14~~13) DIP COATING is to dip an object into a vat of ~~coating~~Coating material and drain off any excess ~~coating~~Coating.

(~~15~~14) ELECTROSTATIC APPLICATION is charging of atomized paint droplets for deposition by electrostatic attraction.

(15) EXECUTIVE OFFICER is as defined in Rule 102 – Definition of Terms (Rule 102).

(16) EXEMPT COMPOUNDS ~~– See~~ are as defined in Rule 102.

(17) EXTREME PERFORMANCE COATING is a two-component high-solids epoxy, urethane or polyester ~~coating~~Coating which requires the mixing of a resin and a catalyst, and is applied to a wood product to achieve a ~~high gloss~~High Gloss and/or high film build coat ~~which cannot be achieved with a low-VOC coating~~, or to protect the wood product from one or more of the following environmental conditions:

(A) Repeated scrubbing with industrial grade detergents, cleaners, or abrasive scouring agents; or

(B) Frequent exposure to water, to outdoor weather, or to ultraviolet radiation.

(18) FACILITY is a business, or public service engaged in Wood Coating operations, including the application of Wood Coatings, that are owned or operated by the same Person or Persons and are located on the same or contiguous parcels.

(~~18~~19) FILLER is a material which is applied to a ~~wood~~Wood ~~product~~Product, and whose primary function is to build up, or fill the voids and imperfections in the ~~wood~~Wood ~~product~~Product to be coated~~. This shall not include~~ including ~~composite~~ ~~wood~~Composite Wood edge ~~filler~~Filler.

(~~19~~20) FLOW COATING is to coat an object by flowing a stream of ~~coating~~Coating over an object and draining off any excess ~~coating~~Coating.

(~~20~~21) GLAZES are a type of stain used to soften or blend the original color without obscuring it.

(~~21~~22) GRAMS OF VOC PER LITER (g/L) OF COATING, LESS WATER AND LESS EXEMPT COMPOUNDS or REGULATORY VOC is the weight of VOC per combined volume of VOC and ~~coating~~Coating solids and can be calculated by the following equation:

$$\text{Regulatory VOC (g/L-coating)} \text{ ~~Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds~~} = \frac{\text{~~}W_s\text{~~}\ W_v - W_w - \text{~~}W_{es}\text{~~}\ W_{ex}}{V_m - V_w - \text{~~}V_{es}\text{~~}\ V_{ex}}$$

Where: ~~W_s~~ W_v = weight of volatile compounds in grams (includes water, Exempt Compounds, and VOCs)

W_w = weight of water in grams

~~W_{es}~~ W_{ex} = weight of ~~exempt compounds~~Exempt Compounds in grams

V_m = volume of material in liters

V_w = volume of water in liters

~~V_{es}~~ V_{ex} = volume of ~~exempt compounds~~Exempt Compounds in liters

For ~~coatings~~ Coatings that contain ~~reactive diluents~~Reactive Diluents, the VOC content of the ~~coating~~Coating is determined after curing. The grams of VOC per liter of ~~coating~~Coating shall be calculated by the following equation:

Regulatory VOC (g/L-coating)

~~Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds~~ = $\frac{\text{~~W}_s\text{~~ W}_v - \text{W}_w - \text{~~W}_{es}\text{~~ W}_{ex}}{V_m - V_w - \text{~~V}_{es}\text{~~ V}_{ex}}$

Where: ~~W~~$_s$ W$_v$ = weight of volatile compounds, in grams, emitted into the atmosphere during curing and analysis (includes water, Exempt Compounds, and VOCs)

W_w = weight of water, in grams, emitted into the atmosphere during curing

~~W~~$_{es}$ W$_{ex}$ = weight of ~~exempt compounds~~Exempt Compounds, in grams, emitted into the atmosphere during curing

V_m = volume of the material, in liters, prior to reaction

V_w = volume of water, in liters, emitted into the atmosphere during curing

~~V~~$_{es}$ V$_{ex}$ = volume of ~~exempt compounds~~Exempt Compounds, in liters, emitted into the atmosphere during curing

(~~22~~23) GRAMS OF VOC PER LITER OF MATERIAL or ACTUAL VOC is the weight of VOC per volume of material and can be calculated by the following equation:

Actual VOC (g/L-material)

~~Grams of VOC per Liter of Material~~ = $\frac{\text{~~W}_s\text{~~ W}_V - W_w - \text{~~W}_{es}\text{~~ W}_{ex}}{V_m}$

Where: ~~W~~$_s$ W$_V$ = weight of volatile compounds in grams (includes water, Exempt Compounds, and VOCs)

W_w = weight of water in grams

~~W~~$_{es}$ W$_{ex}$ = weight of ~~exempt compounds~~Exempt Compounds in grams

V_m = volume of material in liters

(~~23~~24) HIGH FILM BUILD is when the dry-film thickness per application is greater than four thousandths of an inch.

(~~24~~25) HIGH GLOSS is when a ~~coating~~Coating surface shows a reflectance of 75 or more on a 60-degree meter.

(~~25~~26) HIGH-SOLIDS STAINS are stains containing more than ~~1~~ one pound of solids per gallon of material, where the solids content is determined pursuant to ASTM D 2369 – Standard Test Method for Volatile Content of

Coatings (ASTM D 2369), and include wiping stains, ~~glazes~~Glazes, and opaque stains.

(~~26~~27) HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY is ~~an equipment~~ a material application system used to apply ~~coating~~Coating by means of a spray gun which is designed to be operated and which is operated at air pressure between 0.1 and 10.0 pounds per square inch gauge ~~(psig) air pressure~~, measured dynamically at the center of the air cap and at the air horns.

(~~27~~28) INK is a fluid that contains dyes and/or colorants and is used to make markings, but not to protect surfaces.

(~~28~~29) JAPANS are saturated, pure pigments ground in a varnish-like vehicle used as a stain or ~~glaze~~Glaze to create artistic effects, including but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.

(~~29~~30) LOW-SOLIDS COATING is a ~~coating~~Coating containing ~~1~~ one pound, or less, of solids per gallon of material, where the solids content is determined pursuant to ASTM D 2369.

(31) MAXIMUM INCREMENTAL REACTIVITY (MIR) means the measure of the photochemical reactivity of a VOC, which estimates the weight of ozone produced from a weight of VOC expressed as gram of ozone per gram of VOC (g O3/g VOC).

(~~30~~32) MOLD-SEAL COATING is the initial ~~coating~~Coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release ~~coating~~Coating, prevents products from sticking to the mold.

~~(31) MULTI-COLORED COATING is a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.~~

(~~32~~33) OVERALL CONTROL EFFICIENCY (C.E.), in percent, is the ratio of the weight of the VOC removed by the ~~emission control system~~Air Pollution Control System, to the total weight of VOC emitted from wood product ~~coating~~Coating operations, both measured simultaneously, and can be calculated by the following equations:

C.E. = [(Wc-Wa)/We] x 100

C.E. = [(Capture Efficiency) x (Control Device Efficiency)]/100

Where: Wc = weight of VOC entering control device

Wa = Weight of VOC discharged from the control device

We = weight of VOC emitted

(34) PERSON is as defined in Rule 102.

(~~33~~35) PIGMENTED PRIMERS, SEALERS, AND UNDERCOATS are opaque ~~coating~~Coatings which contain ~~binders~~Binders and colored pigments formulated to hide the wood surface, that are applied prior to the topcoat to provide a firm bond, level the wood product surface, or seal the wood product surface.

(~~34~~36) PIGMENTED TOPCOAT is a final opaque ~~coating~~Coating which contains ~~binders~~Binders and colored pigments~~,~~ and is specifically formulated to hide the wood surface and form a solid protective film.

~~(35) POTENTIAL TO EMIT means the maximum capacity of a facility to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, emissions, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the EPA Administrator.~~

(~~36~~37) POUNDS OF VOC PER POUND OF SOLIDS is the weight of VOC per weight of ~~coating~~Coating solids within any given volume of ~~coating~~Coating and can be calculated by the following equation:

$$\text{Pounds of VOC per Pound of Solids} = \frac{\text{~~W}_s\text{~~ W}_v - \text{W}_w - \text{~~W}_{es}\text{~~ W}_{ex}}{\text{W}_r}$$

Where: ~~W_s~~ W_v = weight of volatile compounds in pounds

W_w = weight of water in pounds (includes water, Exempt Compounds, and VOCs)

W_{es} = weight of ~~exempt compounds~~Exempt Compounds in pounds

W_r = weight of ~~coating~~Coating solids in pounds

For ~~coating~~Coatings that contain ~~reactive diluent~~Reactive Diluents, the VOC content of the ~~coating~~Coating is determined after curing. ~~-~~The pounds of VOC per pound of ~~coating~~Coating solids shall be calculated by the following equation:

$$\text{Pounds of VOC per Pound of Solids} = \frac{W_s - W_w - W_{es}}{W_r}$$

Where: W_s = weight of volatile compounds, in pounds, emitted into the atmosphere during curing

W_w = weight of water, in pounds, emitted into the atmosphere during curing

W_{es} = weight of ~~exempt compounds~~Exempt Compounds, in pounds, emitted into the atmosphere during curing

W_r = weight of ~~coating~~Coating solids, in pounds, prior to reaction

(38) PRODUCT-WEIGHTED MIR (PW-MIR) means the sum of all weighted-MIR for all ingredients in a Wood Coating Material. The PW-MIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging) and calculated according to the following equations:

Weighted MIR (Wtd-MIR) ingredient= MIR x Weight Fraction ingredient,

And,

$PW\text{-}MIR = (Wtd\text{-}MIR)_1 + (Wtd\text{-}MIR)_{2+\ldots+}(Wtd\text{-}MIR)_n$

Where,

MIR = ingredient MIR; and

1,2, 3..., n = each ingredient in the product up to the total n ingredients in the product

(~~37~~39) REACTIVE DILUENT is a liquid which is a VOC ~~-~~during application and one in which, through chemical or physical reactions, such as polymerization, becomes an integral part of a finished ~~coating~~Coating.

~~(38) RATE PER DAY is the amount applied between 12:00 a.m. and 11:59 p.m. on the same calendar day.~~

~~(39) RATE PER CALENDAR YEAR is the amount applied between 12:00 a.m. January 1 and 11:59 p.m. December 31.~~

(40) REFINISH is the recoating of wood products that have been previously coated.

(41) REPAIR COATING is a ~~coating~~Coating used to recoat portions of a wood product which has sustained damage to the ~~coating~~Coating following normal painting operations.

(42) ROLL ~~COATER~~COATING is a ~~series of mechanical rollers that applies a thin coating~~Coating ~~on the wood product~~ method using a machine that

applies Coating to a substrate by continuously transferring coating through a pair or set of oppositely rotating rollers.

(43) SHUTTER is a movable screen or cover for a window, usually hinged and often fitted with louvers.

(44) SIMULATED WOOD MATERIALS are materials~~, such as plastic, glass, metal, paper etc.,~~ that are made to give a wood-like appearance or are processed like a wood product and include materials such as plastic, glass, metal, and paper.

~~(45) STENCIL COATING is an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.~~

(~~46~~45) STRIPPER is a liquid used to remove cured ~~coating~~Coatings, cured inks and/or cured adhesives.

(~~47~~46) TONER is a wash coat which contains ~~binders~~Binders and dyes or pigments to add tint to a coated surface.

~~(48) TOUCH-UP COATING is a coating used to cover minor coating imperfections appearing after the main coating operation.~~

(~~49~~47) TRANSFER EFFICIENCY is the ratio of the weight of ~~coating~~Coating solids deposited on an object to the total weight of ~~coating~~Coating solids used in a ~~coating~~Coating application step, expressed as a percentage.

(~~50~~48) VOC COMPOSITE ~~PARTIAL~~ VAPOR PRESSURE is the sum of the partial pressures of the compounds defined as VOCs.

VOC Composite ~~Partial~~ Vapor Pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, in grams (g)

W_w = Weight of water, in grams (g)

W_e = Weight of exempt compound, in grams (g)

MW_i = Molecular weight of the "i"th VOC compound, in $\frac{g}{g\text{-mole}}$

MW_w = Molecular weight of water, in $\frac{g}{g\text{-mole}}$

MW_e = Molecular weight of exempt compound, in $\frac{g}{g\text{-mole}}$

PP_c = VOC composite ~~partial~~vapor pressure at 20°C, in mm Hg

VP_i = Vapor pressure of the "i"th VOC compound at 20°C, in mm Hg

(~~51~~49) VOLATILE ORGANIC COMPOUND (VOC) ~~is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds~~ is as defined in Rule 102.

(~~52~~50) WASHCOAT is a ~~coating~~Coating that contains no more than ~~1.0~~one pound of solids per gallon of material, where the solids content is determined pursuant to ASTM D 2369, and which is used to seal wood product surfaces~~, for any of the following purposes~~ to:

(A) ~~to prevent~~ Prevent undesired staining~~,~~;

(B) ~~to control~~ Control penetration~~,~~;

(C) ~~to provide~~ Provide a barrier when paper laminates are applied to the ~~wood~~Wood ~~product~~Product~~,~~;

(D) ~~to seal~~ Seal ~~glazes~~Glazes~~,~~; or

(E) ~~to improve~~ Improve adhesion of a waterborne topcoat.

(51) WOOD COATING MATERIAL is any Coating, Primer, Sealant, Topcoat, Stain, Ink, or Filler, used during the manufacturing, assembly, refinishing, maintenance or service of a Wood Product.

(~~53~~52) WOOD PRODUCTS are those surface-coated room furnishings which include cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, ~~shutters~~Shutters, art objects, and any other coated objects made of wood, ~~composite wood~~Composite Wood, ~~simulated wood material~~Simulated Wood Coating Material used in combination with wood or ~~composite wood~~Composite Wood; and/or paper laminated on ~~composite wood~~Composite Wood.

(~~54~~53) WOOD PRODUCT COATING APPLICATION OPERATIONS are a combination of ~~coating~~Coating application steps which may include use of

spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other equipment operated for the purpose of applying ~~coating~~Coating materials.

(~~e~~d) Requirements

(1) VOC Content of Wood Coating~~s~~ Materials and Strippers

~~(A) A person~~ No Person ~~or facility~~ shall ~~not~~ manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage any Wood Coating Materials or Stripper for use within South Coast AQMD, nor shall any owner or operator of a Facility apply or solicit ~~any coating to a~~the use of ~~wood product~~ any Wood Coating Materials or Strippers~~, which has a VOC content in excess of the applicable limits specified in Table 1 – Regulatory VOC Content Limits for Wood Material (Table 1) and Table 2 – Regulatory VOC Content Limits for Low Solids Coatings. Compliance with the applicable VOC content limits shall be based on VOC content~~ including any VOC-containing material added to the original ~~coating~~ Wood Coating Material or Stripper~~-~~ supplied by the manufacturer, which contain VOCs in excess of the applicable:

(A) ~~exceeds the applicable~~Regulatory VOC limits specified ~~below~~in Table 1 – Table of Standards (Table 1);

(B) Actual VOC limits specified in Table 2 – Table of Standards for Low-Solids Coatings (Table 2); or

(C) In lieu of complying with the applicable Regulatory or Actual VOC limits specified in Table 1 and Table 2, a Person may manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage a Wood Coating Materials or Stripper for use within South Coast AQMD, and an owner or operator of a Facility may apply or solicit the use of any Wood Coating Materials or Strippers within South Coast AQMD that complies with the alternative PW-MIR VOC limits specified in Table 1 or Table 2 where MIR values for individual VOCs shall be as specified in Sections 94700 and 94701, Title17, California Code of Regulations.

~~(i) VOC LIMITS~~

~~Grams Per Liter (lb/gal) of Coating, [lbs VOC/lb of solids], Less Water and Less Exempt Compounds~~

~~COATING~~	~~Current Limit~~	~~On and After 7/1/97~~		~~On and After 7/1/2005~~
		~~I~~	~~or II~~	
~~Clear Sealers~~	~~680 (5.7) [3.36]~~	~~550 (4.6) [1.39]~~	~~680 (5.7) [3.36]~~	~~275 (2.3) [0.36]~~
~~Clear Topcoat~~	~~680 (5.7) [2.99]~~	~~550 (4.6) [1.37]~~	~~275 (2.3) [0.35]~~	~~275 (2.3) [0.35]~~
~~Pigmented Primers, Sealers & Undercoats~~	~~600 (5.0) [1.08]~~	~~550 (4.6) [1.06]~~	~~600 (5.0) [1.08]~~	~~275 (2.3) [0.21]~~
~~Pigmented Topcoats~~	~~600 (5.0) [1.38]~~	~~550 (4.6) [1.10]~~	~~275 (2.3) [0.25]~~	~~275 (2.3) [0.25]~~

~~Effective July 1, 1997, a person or facility shall use coatings on a wood product that comply with either all VOC limits in column I or all VOC limits in column II. A person or facility that applies a primer, sealer or undercoat, but not a topcoat, to a wood product, shall be subject to column I for that wood product.~~

~~(ii) Notwithstanding the requirements of clause (c)(1)(A)(i), a person or facility that applies a topcoat and a primer, sealer or undercoat to a shutter may, until July 1, 2005, choose to comply with the VOC limits specified below for that shutter:~~

~~VOC LIMITS~~

~~Grams Per Liter, (lb/gal) of Coating, [lbs VOC/lb of solids], Less Water and Less Exempt Compounds~~

~~COATING~~	
~~Clear Sealers~~	~~275 (2.3) [0.36]~~
~~Clear Topcoat~~	~~680 (5.7) [2.99]~~
~~Pigmented Primers, Sealers & Undercoats~~	~~275 (2.3) [0.33]~~
~~Pigmented Topcoats~~	~~600 (5.0) [1.38]~~

~~(iii)~~

~~VOC LIMITS~~

~~Grams Per Liter, (lb/gal) of Coating, [lbs VOC/lb of solids], Less Water and Less Exempt Compounds~~

~~COATING~~	~~Current Limit~~	~~On and After 7/1/97~~	~~On and After 7/1/2005~~
~~Barrier Coat - Plastic Components~~	~~800 (6.7) [6.3]~~	~~760 (6.3) [3.9]~~	~~275 (2.3) [0.28]~~
~~Composite Wood Edge Filler~~	~~680 (5.7) [2.34]~~	~~550 (4.6) [1.15]~~	~~275 (2.3) [0.31]~~
~~Extreme Performance Coatings~~	~~420 (3.5) [0.51]~~	~~420 (3.5) [0.51]~~	~~275 (2.3) [0.33]~~
~~Fillers~~	~~500 (4.2) [0.66]~~	~~500 (4.2) [0.66]~~	~~275 (2.3) [0.18]~~
~~High Solid Stains~~	~~700 (5.8) [2.84]~~	~~550 (4.6) [1.23]~~	~~350 (2.9) [0.42]~~
~~Inks~~	~~500 (4.2) [0.96]~~	~~500 (4.2) [0.96]~~	~~500 (4.2) [0.96]~~
~~Mold Seal Coatings~~	~~750 (6.3) [4.2]~~	~~750 (6.3) [4.2]~~	~~750 (6.3) [4.2]~~
~~Multi-Colored Coatings~~	~~685 (5.7) [2.6]~~	~~685 (5.7) [2.6]~~	~~275 (2.3) [0.33]~~

~~VOC LIMITS~~

~~Grams Per Liter (lb/gal) of Material~~

~~COATING~~	~~Current Limit~~	~~On and After 7/1/97~~	~~On and After 7/1/2005~~
~~Low-Solids Barrier Coat - Plastic Components~~	~~800 (6.7)~~	~~760 (6.3)~~	~~120 (1.0)~~
~~Low-Solid Stains, Toners, and Washcoats~~	~~800 (6.7)~~	~~480 (4.0)~~	~~120 (1.0)~~

~~Any coating subject to this rule that meets any of the three VOC limit formats (grams per liter, lb/gal, or lbs VOC/lb of solids) is in compliance with this subparagraph.~~

Table 1 – Table of Standards

VOC Limits-

Coating Categories	Regulatory VOC limits		lbs VOC/ lb of solids	Alternative PW-MIR Limit
	g/L-Coating	lb/gal-Coating		g O_3/g product
Primer, Sealer, and Undercoats (PSU)				
Clear PSU	275	2.3	0.36	0.53
Pigmented PSU	275	2.3	0.21	0.60
Topcoats (including extreme performance)				
Clear Topcoats	275	2.3	0.35	0.53
Pigmented Topcoats	275	2.3	0.25	0.46
Other Categories				
High-Solids Stains	350	2.9	0.42	1.87
Inks	500	4.2	0.96	N/A
Mold-Seal Coatings	750	6.3	4.2	N/A
Fillers	275	2.3	0.18	N/A
Japans	350	2.9	0.42	N/A
Other Coatings	275	2.3	0.3	N/A

Table 2 – Table of Standards for Low Solids Coatings

VOC Limits

	Actual VOC Limits		Alternative PW-MIR Limit
	g/L-Material	lb/gal-Material	g O_3/g product
Low-Solids Barrier Coat – Plastic Component	120	1.0	N/A
Low-Solids Stains, Toners, and Washcoats	120	1.0	1.03
Strippers	350		TBD

(~~B~~2) Strippers used on Wood Products

Until [*Three Years from Date of Rule Adoption*], in lieu of meeting the Table 2 VOC limit for a Stripper used on Wood Products, ~~A~~a ~~person~~Person may elect to manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage any Stripper for use within South Coast AQMD, or any owner or operator of a Facility may apply or solicit the use of a Stripper ~~shall not use a stripper on wood products unless:~~

~~(i) it contains less than 350 grams of VOC per liter of material; or~~

~~(ii) the VOC composite vapor pressure~~ with a Composite Vapor Pressure of ~~is~~ 2 mm~~-~~Hg ~~(~~0.04 psia) or less at 20ºC (68ºF).

(~~C~~3) In lieu of complying with the VOC limits in ~~Owners and/or operators may comply with provisions of~~ paragraphs ~~(c)(1)(A)~~(d)(1) and ~~(B)~~ (d)(2), an owner or operator of a Facility may demonstrate compliance by using an approved air pollution control system~~, consisting of collection and control devices~~, which reduces VOC emissions from the application of ~~wood~~Wood ~~product coatings~~Coating Materials or ~~strippers~~Strippers by an equivalent or greater amount than the limits specified in subparagraphs ~~(c)(1)(A)~~(d)(1) and ~~(B)~~(d)(2), with the written approval of the Executive Officer. ~~–~~The minimum required ~~o~~Overall ~~c~~Control ~~e~~Efficiency of an ~~emission control system~~ Air Pollution Control System at which an equivalent or greater level of VOC reduction will be achieved shall be calculated by the following equation:

$$C.E. = \left[1 - \left\{\frac{(VOC_{LWc})}{(VOC_{LWn,Max})} * \frac{1 - \left(\frac{VOC_{LWn,Max}}{D_{n,Max}}\right)}{1 - \left(\frac{VOC_{LWc}}{D_c}\right)}\right\}\right] * 100$$

~~$$C.E. = \left[1 - \left\{\frac{(VOC_{LWe})}{(VOC_{LWn,Max})} \times \frac{1 - (VOC_{LWn,Max}/D_{n,Max})}{1 - (VOC_{LWe}/D_e)}\right\}\right] \times 100$$~~

Where: C.E. = Overall Control Efficiency, percent

VOC_{LWc} = VOC Limit of Rule 1136, less water and less ~~exempt compounds~~Exempt Compounds, pursuant to subparagraph (c)(1)(A).

$VOC_{LWn,Max}$ = Maximum VOC content of non-compliant ~~coating~~Coating used in conjunction with a control device, less water and less ~~exempt compounds~~Exempt Compounds.

$D_{n,Max}$ = Density of solvent, reducer, or thinner contained in the non-compliant ~~coating~~Coating, containing the maximum

VOC content of the multicomponent ~~coating~~Coating.

D_c = Density of corresponding solvent, reducer, or thinner used in the compliant ~~coating~~Coating system = 880 G/L.

~~(D) Emissions Averaging Provisions~~

~~(i) Owners or operators may comply with the provisions of subparagraph (c)(1)(A) by using an averaging approach for all or a portion of the coatings used at the facility, provided all requirements of this subparagraph are met. The owner or operator shall demonstrate that actual emissions from the coatings being averaged are less than or equal to 90 percent of the allowable emissions, on a daily basis, using the following inequality:~~

$$0.09 \sum_{i=1}^{n} VOC_i (U_i) \geq \sum_{i=1}^{n} ER_i (U_i)$$

~~Where:~~

~~VOC_i = VOC content limit of coating "i" (pounds (lb) of VOC/gallon of material for low solids coatings; and lb VOC/lb of solids for all other coatings), as required by subparagraph (c)(1)(A);~~

~~U_i = Usage of coating "i" (gallons of material for low solids coatings; and lb of solids for all other coatings); and~~

~~ER_i = Actual VOC content of coating "i", as applied (lb of VOC/gallon of material for low solids materials; and lb VOC/lb of solids for all other coatings).~~

~~The 0.9 multiplier above is not applicable after June 30, 2005, or to facilities with a potential to emit less than 10 tons of VOC per year. Any wood product coating not included in the emission averaging shall comply with the VOC limits in subparagraph (c)(1)(A).~~

~~(ii) Emissions Averaging Plan (Plan)~~

~~Owners or operators shall submit a Plan, pursuant to Rule 221 - Plans, to the Executive Officer to participate in emissions averaging. The plan may not be implemented until it is approved in writing by the Executive Officer. Submittal of the Plan does not provide an exemption from the rule requirements. The Plan shall include, at a minimum:~~

~~(I) A description of the wood product coatings to be included in the averaging program; and~~

~~(II) A description of the quantification and recordkeeping procedures for coating usage; coating VOC and solids content; VOC emissions; and calculations to show daily compliance with clause (c)(1)(D)(i).~~

(~~2~~4) Transfer Efficiency

An ~~person or~~ owner or operator of a ~~facility~~Facility shall ~~not~~ apply ~~coatings~~Wood Coating Materials to ~~wood~~Wood ~~products~~Products using ~~subject to the provisions of this rule unless the coating is applied with~~ properly operating equipment, operated according to procedures specified by the equipment manufacturer, and in compliance with the applicable permit conditions, if any, ~~the equipment manufacturer's operating procedures, and~~ by ~~the use of~~ one of the following methods:

(A) ~~electrostatic application~~Electrostatic Application; ~~or~~

(B) ~~flow coat~~Flow Coating; ~~or~~

(C) Roll Coating;

(~~C~~D) ~~dip coat~~Dip Coating; ~~or~~

(~~D~~E) ~~high volume, low pressure (~~HVLP) ~~spray~~Spray; ~~or~~

(~~E~~F) ~~paint~~Paint brush; ~~or~~

(~~F~~G) ~~hand~~Hand roller; or

~~(G) roll coater; or~~

(H) Any such other ~~coating~~Wood Coating Material application methods as ~~are~~ demonstrated, in accordance with the provisions of paragraph (i)(5), to the Executive Officer to be capable of achieving equivalent or better Transfer Efficiency than the Wood Coating Material application method listed in subparagraph (d)(4)(E), provided ~~at least 65 percent transfer efficiency, and for which~~ written approval is obtained from ~~of~~ the Executive Officer ~~has been obtained~~.

(5) Solvent Cleaning Operations; Storage and Disposal ~~of VOC-containing Materials~~

An owner or operator of a Facility conducting solvent cleaning, which means the use of a cleaning solvent for the removal of loosely held uncured coatings, and contaminants such as dirt, soil, and grease~~Solvent cleaning operations~~ and the storage and disposal of VOC containing materials shall:

(A) Comply with ~~are subject to~~ the provisions of Rule 1171 - Solvent Cleaning Operations; and

(B) Not atomize any solvent cleaner unless it is used within an approved Air Pollution Control System.

(e) Alternative Emission Control Plan

An owner or operator may achieve compliance with paragraph (d)(1) by means of an Alternative Emission Control Plan pursuant to Rule 108 – Alternative Emission Control Plans.

(f) Prohibition of Possession, Specification, Sale or Use

(1) Effective after the applicable Manufacturer Prohibition Date in Table 3 – Prohibition Schedule (Table 3), no Person shall manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage a Wood Coating Material or Stripper for use within South Coast AQMD, nor shall any owner or operator of a Facility possess, apply, or solicit for use any Wood Coating Material or Stripper, including any VOC-containing materials added to the original Wood Coating Material or Stripper supplied by the manufacturer, that contains any of the following chemicals in concentrations greater than the limits indicated below:

(A) 0.01 percent by weight of Group II Exempt Compounds, excluding volatile methylated siloxanes (VMS);

(B) 0.1 percent by weight of VMS; or

(C) 0.01 percent by weight of para-Chlorobenzotrifluoride (pCBtF, Chemical Abstracts Service Registration Number 98-56-6) and/or *tert*-Butyl Acetate (t-BAc, Chemical Abstracts Service Registration Number 540-88-5) for Wood Coating Materials or Strippers manufactured after the applicable Prohibition Date in Table 3 -

(2) Sell Through for pCBtF and/or t-BAc containing materials

Any Wood Coating Material or Stripper that is manufactured prior to the applicable Table 3 Final Manufacture Date, that contains more than 0.01

percent of pCBtF and/or t-BAc, may be sold, supplied, or offered for sale until the applicable Table 3 Sell-Through Date and may be possessed, used, or solicited for use until the applicable Table 3 Use-Through Date.

Table 3: Prohibition Schedule

Category	Final Manufacture Date	Sell-Through Date	Use-Through Date
Wood Coating Materials	[*Three Years after Date of Rule Adoption*]	[*Four Years after Date of Rule Adoption*]	[*Five Years after Date of Rule Adoption*]
Strippers	[*Two Months after Date of Rule Adoption*]	[*One Years after Date of Rule Adoption*]	[*Two Years after Date of Rule Adoption*]

(~~d~~g) ~~Recordkeeping~~Administrative Requirements

~~Records shall be maintained pursuant to Rule 109 or pursuant to an approved Emissions Averaging Plan, whichever is applicable. If compliance with the VOC limits in subparagraph (c)(1)(A) is based on the pounds of VOC per pound of solids format, then the operator shall keep a record of the VOC content of the coating in pounds of VOC per pound of solids in addition to complying with the requirements of Rule 109.~~

(1) An owner or operator of a Facility shall maintain records pursuant to the requirements of Rule 109 – Recordkeeping for Volatile Organic Compound Emissions (Rule 109).

(2) An owner or operator of a Facility complying with the VOC limits in subparagraph (d)(1)(A) based on the pounds of VOC per pound of solids, shall keep a record of the VOC content of the Wood Coating Materials in pounds of VOC per pound of solids in addition to complying with the requirements of Rule 109.

(3) Labeling Requirements for Materials Containing Organic Solvents

A Person shall not manufacture, supply, sell, offer for sale, market, blend, distribute, package, or repackage for use in South Coast AQMD any Wood

Coating Material or Stripper unless they are labeled in accordance with South Coast AQMD Rule 443.1 – Labeling of Materials Containing Organic Solvents.

(4) Labeling Requirements for Wood Coating Materials Complying with the alternative PW-MIR VOC Limits

A Person that manufacturers, supplies, sells, offers for sale, markets, blends, distributes, packages, or repackages for use in South Coast AQMD any Wood Coating Material that elects to comply with the alternative PW-MIR VOC limits in subparagraph (d)(1)(C), shall include the PW-MIR VOC content in g O3/g product, on all containers.

~~(e) Prohibition of Specifications~~

~~A person shall not specify the use in the District of any coating to be applied to any wood products subject to the provisions of this rule that does not meet the limits and/or requirements of this rule. The requirements of this paragraph shall apply to all written or oral contracts.~~

(~~f~~h) Test Methods

(1) ~~The~~ VOC content of Wood Coating Materials~~coatings and strippers shall be determined by:~~

The VOC content of Wood Coating Materials shall be determined by:

(A) United States Environmental Protection Agency (U.S. EPA) Reference Method 24 ~~(~~- Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coating, Code of Federal Regulations Title 40 Part 60, Appendix A~~),~~ with the Exempt Compounds' content determined by ~~or~~ South Coast AQMD Test Method 303 – Determination of Exempt Compounds; or

(B) South Coast AQMD Test Method 304 ~~(~~- Determination of Volatile Organic Compounds (VOCs) in Various Materials~~). in the South Coast Air Quality Management District (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples" manual.~~

(~~B~~2) ~~The exempt~~Exempt Perfluorocarbon ~~compounds'~~Compounds ~~content shall be determined by:~~

~~(i) Methods 302 (Distillation of Solvents from Paints, Coatings and Inks) and 303 (Determination of Exempt Compounds) in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.~~

~~(ii)~~ The following classes of compounds~~: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine, will~~ shall be analyzed as ~~exempt eCompounds~~ Exempt Compounds for compliance with subdivision (~~e~~d), only at such time as manufacturers specify which individual compounds are used in the ~~coating~~ Wood Coating Materials formulations and identify the test methods, which~~, prior to such analysis,~~ have been approved by the U.S. EPA, California Air Resources Board (CARB), and the South Coast AQMD, prior to such analysis, that can be used to quantify the amounts of each ~~e~~Exempt ~~e~~Compound~~.~~:

(A) Cyclic, branched, or linear, completely fluorinated alkanes;

(B) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(C) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(2) Film build thickness shall be determined using ~~American Society of Testing Materials (~~ASTM~~)~~ Test Method D5235~~, as adopted in 1992~~.

(3) Gloss shall be determined using ASTM Test Method D 523~~, as adopted in 1989~~.

(4) For the purpose of calculating the VOC ~~e~~Composite ~~v~~Vapor ~~p~~Pressure of a VOC-containing material, the composition of the material shall be based on the known formulation of the material or determined by South Coast AQMD Test Method 308~~ in the SCoast AQMD "Laboratory Methods of Analysis for Enforcement Samples"~~.

(5) Determination of Efficiency of 4` Systems

A Person or Facility that elects to comply with the VOC limits in paragraphs (d)(1) and/or (d)(2) using an Air Pollution Control System shall:

(A) Determine the Capture Efficiency of the control device in the Air Pollution Control System by South Coast AQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency;" and

(B) Determined the Capture Efficiency and the VOC content in the Air Pollution Control System exhaust gases, measured and calculated as carbon by:

(i) U.S. EPA Method 25 – Determination of Total Gaseous Non-methane Organic Emissions as Carbon;

(ii) U.S. EPA Method 25A – Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer;

(iii) South Coast AQMD Test Method 25.1 – Determination of Total Gaseous Non-Methane Organic Emissions as Carbon; or

(iv) South Coast AQMD Test Method 25.3 – Determination of Low Concentration Non-Methane Non-Ethane Organic Compound Emissions from Clean Fueled Combustion Sources

~~For determining the concentration of VOC in a gas stream and the efficiency of a control device, the total organic compound concentrations shall be determined using USEPA Test Method 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable, and the concentration of exempt compounds shall be determined using either USEPA Test Method 18 or California Air Resources Board Method 422.~~

~~(6) The capture efficiency of an emission control system as defined in paragraph (b)(3) shall be determined by a minimum of three sampling runs subject to the data quality objective (DQO) presented in the USEPA technical guidance document "Guidelines for Determining Capture Efficiency", January 9, 1995. Individual capture efficiency test runs subject to the USEPA technical guidelines shall be determined by:~~

~~(A) Applicable USEPA Methods 204, 204A, 204B, 204C, 204E, and/or 204F; or~~

~~(B) The SCAQMD "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency"; or~~

~~(C) Any other method approved by the USEPA, the California Air Resources Board, and the SCAQMD Executive Officer.~~

(7) Transfer Efficiency

The ~~t~~Transfer ~~e~~Efficiency of alternative ~~coating~~Coating application methods shall be determined in accordance with the most current versions of the South Coast AQMD methods:

(A) "Spray Equipment Transfer Efficiency Test Procedure for Equipment User~~, May 24, 1989.~~;" and

(B) "Guidelines for Demonstrating Equivalency With District Approved Transfer Efficiency Spray Gun."

(8) Multiple Test Methods

When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

(9) Equivalent Test Methods

Other test methods determined to be equivalent and approved by the U.S. EPA, CARB, and the South Coast AQMD Executive Officer, and approved in writing by the South Coast AQMD Executive Officer may also be used.

(~~9~~10) All test methods referenced in this subdivision shall be the most recently approved version.

(~~g~~i) Continuous Monitors

(1) Each ~~coating~~Coating operation subject to subparagraph ~~(c)(1)(C)~~ (d)(1)(C) shall have a continuous monitor, as approved by the Executive Officer, for any add-on control device used to meet the control requirement.

(2) Records of the monitoring devices pursuant to paragraph ~~(g)(1)~~(i)(1) and other data necessary to demonstrate compliance with the control requirements shall be maintained on the premises and made accessible for a period of two years to the Executive Officer in a form and manner as specified by the Executive Officer.

(3) Compliance with subparagraph ~~(c)(1)(C)~~(d)(1)(C) shall be determined by source testing and/or evaluating continuous monitor data.

(4) Each monitoring device used pursuant to paragraph ~~(g)(1)~~(i)(1) shall be calibrated in a manner approved by the Executive Officer and maintained in optimum working order.

(~~h~~j) Rule 442 Applicability

Any owner or operator of a ~~coating, coating operation, or facility~~ Facility who uses Wood Coating Materials that ~~which is~~ are exempt from ~~all or a portion of~~ the VOC limits of this rule, shall comply with the provisions of Rule 442 – Usage of Solvents. ~~unless compliance with the limits specified in this rule is achieved~~.

~~(i) Alternative Emission Control Plan~~

~~An owner or operator may achieve compliance with paragraph (c)(1) by means of an Alternative Emission Control Plan pursuant to Rule 108.~~

~~(j) Progress Reports~~

~~Owners or operators shall submit a progress report to the Executive Officer by January 1, 2003. The Progress Report shall include at a minimum:~~

~~(1) a statement that the facility or facilities are in compliance with the final Rule 1136 VOC limits; or~~

~~(2) for each facility, a description of their wood coating process, the wood product types, the wood coatings currently in use and their VOC contents, the low-VOC wood coatings which will be tested, any expected wood coating process or control equipment modifications, and the results of previous low-VOC coating tests. Facilities shall also report if they are planning to use Mobile Source Emission Reduction Credits (MSERCs) pursuant to Regulation XVI or other alternative emission reductions allowed by District rules.~~

~~(k) Air Quality Management Plan (AQMP) Technology Assessment Audit~~

~~The Executive Officer shall audit Rule 1136 by July 1, 2003 to assess the feasibility of the final VOC limits and whether new technology could provide additional reductions to meet the District's AQMP objectives.~~

(~~l~~k) Exemptions

(1) The provisions of paragraphs ~~(c)(1)~~(d)(1) and ~~(c)(2)~~(d)(2) of this rule shall not apply to facilities that use less than one gallon per day of ~~coating~~Coating, as applied, subject to this rule.

(2) The provisions of this rule shall not apply to ~~coating~~Coating operations subject to, and in compliance with, the provisions of Rule 1104 – Wood Flat Stock Coating Operation.

~~(3) The provisions of subparagraphs (c)(1)(A) and (C) shall not apply to the manufacturing of classic guitars until July 1, 2005.~~

~~(4) Refinishing, Replacement, and Custom Replica Furniture Operations: Until July 1, 1998, the provisions of subparagraphs (c)(1)(A) and (C) shall not apply to any refinishing operations necessary for preservation, to return the wood product to original condition, to replace missing furniture to produce a matching set, or to produce custom replica furniture, provided records are maintained daily for two years as to the amount, type and VOC content of each coating used.~~

~~(5) The provisions of paragraph (c)(1) shall not apply to touch-up and repair coatings until July 1, 2005.~~

(~~6~~3) The provisions of this rule shall not apply to ~~a~~Aerosol ~~c~~Coating ~~p~~Products.

~~(7) Notwithstanding the requirements of Rule 109(c)(1), Recordkeeping for Volatile Organic Compound Emissions, any facility that switches to waterborne coatings that meet the July 1, 2005 VOC limits may request written approval from the Executive Officer to record data on up to a quarterly basis, provided the Executive Officer determines that such recordkeeping allows for an equivalent level of enforceability.~~

~~(8) Notwithstanding the provisions of paragraph (c)(2), a person or facility may use:~~

~~(A) any spray equipment that uses only coatings that comply with the July 1, 2005 VOC limits; or~~

~~(B) any spray equipment, except conventional air spray, that uses only coatings that contain 550 grams, or less, of VOC per liter of coating, less water and less exempt compounds.~~

(~~9~~5) The provisions of paragraph ~~(c)(2)~~(d)(2) shall not apply to air brushes with a capacity of four fluid ounces, or less.

(~~10~~) ~~The provisions of subparagraph (c)(1)(A) shall not apply to japans, provided the VOC content is 700 grams of VOC per liter of coating, less water and exempt compounds, or less, as applied.~~

(~~11~~6) Until [*Three Years from Date of Rule Adoption*], ~~Notwithstanding~~ notwithstanding the provisions of subparagraph ~~(c)(1)(A)~~(d)(1)(A), a ~~person or~~ owner or operator of a ~~facility~~Facility may add up to 10% by volume of VOC to a topcoat, primer, sealer or undercoat to avoid blushing of the finish during high humidity provided ~~that~~:

(A) ~~the~~ The ~~coating~~Coating is not applied from April 1 to October 31 of any year; and

(B) ~~the~~ The ~~coating~~Coating contains acetone and no more than 550 grams of VOC per liter of ~~coating~~Coating, less water and ~~exempt compounds~~Exempt Compounds, prior to the addition of VOC.