

NESHAP APPLICABILITY TO PROCESSES AT WOOD PRODUCTS FACILITIES  
( February 2000)

Description of Process/Category	NESHAP Coverage			
	Plywood & Composite Wood Products	Flatwood Paneling/Wood Building Products	Wood Furniture	Industrial Boilers
<u>General</u> : Production of reconstituted wood products, plywood, wood veneers, and engineered wood products; emissions from lumber kilns.	X			
<u>General</u> : Surface coating of wood building products (e.g., application of paints, stains, sealers, topcoats, base coats, primers, enamels, inks, adhesives, and temporary protective coatings); includes lamination of wood building products.		X		
<u>General</u> : Wood furniture manufacturing operations--finishing, gluing, cleaning, and washoff operations associated with production of wood furniture or wood furniture components			X	
Boilers/fuel cells/heaters that exhaust gas to <b>direct-fired</b> wood particle or veneer dryers (i.e., combustion unit exhaust contacts wood particles or veneers)	X			
Boilers/fuel cells/heaters that supply heat/steam to <b>indirect-fired</b> wood particle or veneer dryers, or presses (i.e., combustion unit exhaust does <u>not</u> contact wood particles or veneers); thermal oil heaters that supply hot oil for presses (but that don't exhaust through dryers)				X
Manufacture of structural (non-furniture) products such as trimboard that involve cold-pressed glues, and that are coated before and/or after the boards are glued together		X		
Manufacture of structural (non-furniture) products such as laminated veneer lumber that involve heat-activated glues	X			

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Edge-coating, labeling, and printing (nail lines, trademarks, etc.) of reconstituted wood products and plywood	X			
Moisture sealants and anti-skid coatings applied to reconstituted wood products	X			
Putty/patching operations at plywood plants (including wood patches, synthetic patches and wood putty)	X			
Application of concrete forming oil to plywood	X			
Application of fillers (e.g., shelving edge fillers) to reconstituted wood products.	X			
Veneer composing	X <sup>1</sup>			
Painting of company logo, etc., on plywood or reconstituted wood products	X			
Primer applied to OSB siding at site of manufacture	X			
Manufacture of high or medium density overlay (HDO or MDO) panels (made by putting a resin-impregnated paper on top of plywood layers or a reconstituted wood product prior to hot pressing)	X			
Lumber kilns	X			
Furniture manufacturing operations, such as application of hardwood veneer to a substrate (e.g., plywood or a reconstituted wood product substrate), that involve UF adhesives	X		Specifically excludes UF adhesives	

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Production of laminated board (e.g., vinyl or melamine resin-impregnated paper applied on top of reconstituted wood product substrate)		X	Specifically excludes resin-impregnated materials from definition of adhesive <sup>2</sup>	
Production of solid wood (plank or parquet) flooring (includes surface coating operations and any associated gluing operations [e.g., gluing mats to the back sides of parquet flooring])		X		
Production of laminated wood flooring (e.g., Pergo® flooring)		X		
Veneer applied to substrate using PVA resin (e.g., table tops)	X <sup>3</sup>			
Wood treatment operations (e.g., pretreatment of window frames prior to coating operations) that involve dipping a wood building product in, or coating it with, the wood treatment chemicals.		X		
Wood treatment or fire retardant operations located at wood products facilities that involve impregnating the wood product with the wood treatment chemicals or fire retardant by using a retort or other pressure vessel. <sup>4</sup>				
Fire retardants applied to reconstituted wood products prior to or during the forming process (e.g., added in with the resin).	X			

<sup>1</sup> Veneer composing involves edge-gluing smaller sheets of wood veneers together to form a larger sheet; facilities that only do veneer composing were excluded from the plywood and particleboard Information Collection Request (survey).

<sup>2</sup> Adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substance are not considered adhesives under the

wood furniture NESHAP.

- <sup>3</sup> Polyvinyl acetate (PVA) resins were excluded from the wood furniture NESHAP along with UF resins. Although PVA is not a hazardous air pollutant (HAP), vinyl acetate is a HAP, and it can be released from PVA resins.
- <sup>4</sup> Wood treatment operations previously were delisted from EPA's source category list; so stand-alone wood treatment operations would not be covered or would be covered under a separate NESHAP if the source category is "relisted." Pressurized wood treatment operations that are collocated with major source wood products plants contribute to the major source status, but no determination has been made yet regarding whether collocated pressurized wood treatment operations would be covered by any of the NESHAP listed above.

NESHAP = national emission standards for hazardous air pollutants

HB = hardboard

MDF = medium density fiberboard

OSB = oriented strandboard

PB = particleboard

UF = urea formaldehyde

Reconstituted wood products = PB, HB, MDF, OSB, strawboard, fiberboard

Plywood = both softwood and hardwood plywood

Engineered wood products = I-joists, laminated veneer lumber, parallel strand lumber, laminated strand lumber, glue-laminated beams, etc.