

# CLEAN AIR REGULATIONS **&**Your Utah Business

# Wood Furniture Manufacturers

Compliance Options and Regulatory Requirements under the Clean Air Act

f you own a Utah Business that manufactures wood products, then you should be aware of a federal clean air regulation that could apply to your business. A U.S. Environmental Protection Agency (EPA) standard - the National Emissions Standard for Hazardous Air Pollutants (NESHAP) - is part of a national effort to limit chemicals called Hazardous Air toxic Pollutants (HAPs) whose emissions can cause adverse health effects. The rule is called the National Emission Standard for Furniture Wood Manufacturing Operations. This standard requires the EPA to determine what pollution control is appropriate for maximum achievable control technology (MACT). The EPA determined the MACT requirements with the assistance of the wood furniture industry and the public. The rule specifies HAP content in coating and adhesive products. The rule also specifies work practices and recordkeeping requirements.

# Does this rule apply to my business?

This rule applies to wood furniture manufacturing businesses that have the potential to emit 10 tons per year of a single hazardous air pollutant (HAP) or 25 tons per year of a combination of HAPS. The 10 and 25 ton emission level is called a "major source." Review your air permit for permitted HAP emissions, if the emissions exceed the 10 and 25 tpy thresholds of this rule, the rule applies to your business. If you don't have a permit you should start the permitting process with a letter to the Utah Division of Air Quality describing your business and the quantities of painting products you use in a year. The 10 and 25 tons of HAPs per year emission levels could be exceeded with as little as 1,100 and 2,800 gallons per month using a 8 lb-VOC/ gallon paint with a 30% HAP content.

# What wood manufacturers are regulated?

The rule defines wood furniture manufacturing as any product made of wood or wood products such as rattan, wicker or particle-board and is manufactured under one of the following Standard Industrial Classification (SIC) codes:

SIC	Product Manufactured

- 2434 Wood kitchen cabinets
- 2511 Wood household furniture (non-upholstered)
- 2512 Wood household furniture (upholstered)
- 2517 Wood TV, radio, phonograph, & sewing cabinets
- 2519 Household furniture not elsewhere classified
- 2521 Wood office furniture
- 2531 Public building and related furniture
- 2541 Wood office fixtures, partitions, shelving & lockers
- 2599 Furniture and fixtures not elsewhere classified
- 5712 Furniture stores

# How will my business be affected?

The rule limits the hazardous air pollutant (HAPs) content in the finishing products and spells out work practices that minimize emissions from the storage, transfer, and application of coatings and solvents. Wood furniture manufacturing operations include those HAP emitting processes such as finishing, gluing, cleaning, and wash-off used when making wood furniture or wood furniture components.

# What are hazardous air pollutants or HAPs?

Hazardous air pollutants, which are known as HAPs, are chemicals that are known or suspected causes of cancer, or other serious health problems, including damage to the respiratory or nervous systems, birth defects, and reproductive effects. HAPs are released during the drying process for coatings and adhesives. There are 188 chemicals designated as HAPs in the Clean Air Act Amendments of 1990. The HAP list is available from the Small Business Assistance Program at 801-536-4000 or 800-270-4440 if located outside the Salt Lake City area.

### How do I find out what HAPs my business is using?

Certified Product Data Sheets (CPDS) are furnished by coating and adhesive suppliers. They provide information on the HAP content of the finishing material, contact adhesive or solvent. This rule applies to all finishing materials (such as stains, sealers, enamels, and thinners), adhesives, and strippable spray booth coatings. The Small Business Assistance Program has detailed guides available to help businesses perform this calculation. Ask for the fact sheet titled: "How to Estimate Your Hazardous Air Pollutant Emissions."

Note: CPDS are not the same as material safety data sheets (MSDS).

### What does the rule require?

- Use paint products which comply with HAP emission limits. Emission limits specify the maximum HAP content allowed in the products used to assemble and finish the product.
- 2. Keep records current and submit reports.
- 3. Develop work practice implementation plans.

### **Compliance Options**

If your business is affected by this rule, you must comply with emission limits for each step in the manufacturing process. The rule sets emission limits for volatile hazardous air pollutants (VHAPs).

The "Emission Limits" table summaries and lists the compliance options for finishing and gluing for а new wood furniture manufacturer. wood furniture Α new manufacturer constructed is one or reconstructed after 12-06-94.

The emissions for an **existing** wood furniture manufacturer, in operation before 12-6-94, are different. If you are an "existing" wood furniture manufacturer contact the Utah Small Business Assistance Program for additional information.

Monitoring, recordkeeping and reporting responsibilities will vary according to the compliance method you choose.

# What records must I keep for this rule?

Regulated Sources	<ul> <li>CPDS for each coating applied</li> <li>VHAP (Ib VHAP/Ib Solid) content each material applied</li> <li>VOC (Ib VOC/Ib solid) content strippable booth coating</li> <li>Work Practice Implementation Plan</li> <li>Compliance certifications and compliance status report</li> </ul>		
Compliant Coatings Option	Certified Public Data Sheets (CPDS)		
Averaging Option	Averaging calculation for each coat- ing & thinner used		
Control Device Option	Overall control efficiency calculation		
Combination	All of the above		
Incidental Wood Furniture Manufac- turers	Retain invoices for materials used		
You must keep all records for five years			

### **Emission Limits**

1. Finishing Operations:	lb VHAP/lb Solids <sup>1</sup>		
Compliance Option A: Weighted Average (all coatings)	0.8		
Compliance Option B: Compliant Coatings			
Stains	1.0		
Washcoats, Basecoats, Enamels	0.8 <sup>2</sup>		
Sealers,Topcoats	0.8		
Thinners (max % HAP)	10%		
Compliance Option C: Control Device	e 0.8 <sup>3</sup>		
Compliance Option D: Combination A,B,C	0.8		
2. All Cleaning Operations:	lb VOC/lb Solids <sup>4</sup>		
Strippable Spray Booth Materials	0.8		
3. Gluing Operations:	lb VHAP/lb Solids <sup>1</sup>		
Compliance Option A: Compliant Coatings			
Aerosol contact adhesive and cont adhesives applied to nonporus substrates	tact No limit on VHAP content		
Foam adhesives meeting flame te	st 0.2		
All other contact adhesives (includ foam adhesives used in products r meeting flammability requirements	not		
Compliance Option B: Control Devic	e 0.2 <sup>5</sup>		
<ul> <li><sup>1</sup> Ib VHAP/Ib solids means pounds of volatile HAP per pound of solids as applied (includes solvent added for in-house dilution).</li> <li><sup>2</sup> If washcoats, basecoats and enamels are formulated on site, they applied for the formulated on site and the formulated on site.</li> </ul>			
must be formulated using compliant finishing materials and thinners containing no more than 3% HAP by weight. <sup>3</sup> The control device must operate at a sufficient efficiency so no more than 0.8 pound of VHAP is being emitted per pound of solids used.			
<sup>4</sup> lb VOC/lb solid means pound of volatile organic compounds per pound of solids as applied (include solvent added for in-house dilution).			
<sup>5</sup> The control device must operate at a sufficient efficiency so no more than 0.2 pound of VHAPs is being emitted per pound of solids used.			

### Work Practice Standards

In addition to meeting emission limits, your business is responsible for writing and maintaining a "Work Practice Implementation Plan" to ensure compliance with required work practices. The work practice standards identifies a number of tasks specific to storage, handling and application of materials. It indicates efficient practices to accomplish all of these tasks. The plan must be kept on site and include:

- Documentation of conventional air spray gun usage
- an inspection and maintenance plan
- an operator training program
- a solvent accounting system (HAPs baseline exceedance)
- a formulation assessment plan.

In addition, the rule outlines specific housekeeping requirements for cleaning operations, and are presented below:

### Housekeeping Requirements

- Close all storage containers when not in use.
- Collect solvent from gun cleaning and line flushing in a closed container.
- Keep washoff tank covered when not in use
- Minimize dripping, tilt and rotate the part to drain as much solvent as possible, and allow sufficient dry time.
- Use appropriate washoff and cleaning materials.
- Use appropriate spray booth cleaners

# What other air quality rules may apply to me?

- Operating Permit If the rule on these pages applies to you, the operating permit program will applies to you.
- Emission standards for Wood Furniture Manufacturing Operations - applicable to wood manufacturers in Salt Lake and Davis counties. Applicable to businesses with 25 tpy volatile organic compounds (not HAPS).
- Construction Permit Adding additional pollution control equipment.

# What reports must I submit?

Periodically, owners must submit reports to the Utah Division of Air Quality indicating their compliance status. The table below gives reporting deadlines and compliance dates:

Reporting Deadlines		
Initial Notification	Upon Start-up or upon be- coming a major source	
Compliance Status Report	60 Days after start-up	
Semi-Annual Report	30 Days after the end of each 6-Month period	

Note: Most companies regulated by this rule will have an air permit from the Utah Division of Air Quality, check your permit to see what dates are specified in the permit.

## Send original copies to:

HAP Section Utah Division of Air Quality 150 N. 1950 West Salt Lake City UT 84116

This guide provides an *overview* of your compliance requirements, it does not address all aspects of the **National Emission Standards for Wood Furniture Manufacturing Operations,** such as test methods.

Detailed guidance documents are available explaining the rule. For more information or assistance with meeting your compliance requirements contact the Utah Small Business Assistance Program at 801-536-4000 or 800-270-4440 if located outside the Salt Lake City area.