

**Section I :**

**Introduction**



## Section I: Introduction

This workbook provides your company with efficient manufacturing techniques to stay competitive.

### Purpose

This simple, easy to use reference of waste reduction opportunities for wood finishers and manufacturers includes waste reduction ideas that can

- ! reduce operating costs,
- ! improve product quality,
- ! reduce risk to worker health and safety,
- ! limit waste related liability, and
- ! enhance your company's image.

We went straight to the experts for this information: other businesses just like yours trying to optimize their product while realizing cost savings.

This manual offers your company tips on how to:

- ! improve manufacturing efficiency
- ! conserve raw materials
- ! minimize waste volume, toxicity and disposal costs
- ! eliminate or minimize the number of regulatory requirements that apply to your operations and the risk of associated penalties
- ! meet the customer's growing desire for environmentally-responsible products made by environmentally-responsible processes
- ! be recognized as a good business neighbor who protects the environment
- ! provide workers a safer work place with less hazardous materials and processes

### Design of the Workbook

#### *How Will My Company Benefit?*

The degree of benefit that results from implementing any of the waste reduction opportunities will depend on the operations at your facility. For example, large manufacturers with large lumber inventories and kiln drying facilities may realize a significant benefit from implementing the opportunities summarized in Section IV - Lumber Receiving, Drying and Storage. However, smaller manufacturers may find their largest benefits in Section VII - Coating your Finished Product, as finishing operations may generate the majority of wastes in a smaller manufacturing facility.

This manual explores groupings of manufacturing processes encountered in the wood manufacturing industry. Each grouping includes:

- ! process overview
- ! potential wastes: both solid and hazardous
- ! waste reduction options

The latter section summarizes different waste reduction processes, including where applicable:

- ! benefits and cautionary measures
- ! brief, related case studies
- ! checklists

#### *Wondering how to begin a waste reduction program?*

For companies just starting a waste reduction program, a brief overview of the basic steps for developing an EPA recommended program precedes the more technical aspects of individual wood manufacturing

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processes. You may also reference Appendix F, a worksheet to conduct an on-site team assessment of your facility.

Companion documents that can be used with this manual include:

- ! The American Furniture Manufacturers Association (AFMA) *Environmental Guide for the Furniture Industry* which provides information for regulatory compliance and environmental management.
- ! SHWEC *Pollution Prevention: A Guide to Program Implementation* which provides information for establishing and implementing a pollution prevention/waste reduction program at your facility.

### *Who's Who in Wisconsin*

According to 1995 data from the U.S. Department of Commerce, there are nearly 1,500 wood product manufacturing facilities in Wisconsin (see below), the majority of which employ less than 20 people.

SIC Code	Description	# of employees	Business by number of employees				
			Total	1-19	20-99	100-499	>499
2400-2499	Lumber and wood products	29,546	1,283	1,011	210	58	4
2511	Wood household furniture	4,586	79	57	15	6	1
2517	Wood TV and radio cabinets	108	5	2	3	0	0
2521	Wood office furniture	351	10	6	3	1	0
2541	Wood partitions and fixtures	1,906	64	43	17	4	0
<b>Total</b>		<b>36,497</b>	<b>1,441</b>	<b>1,119</b>	<b>248</b>	<b>69</b>	<b>5</b>