

## **Wood Furniture Manufacturing Pollution Prevention Opportunities Checklist**

The following checklists are excerpts from **Wood Furniture Manufacturing Workbook**  
*Chapter 5. Identifying & Implementing Best Management Practices & Pollution Prevention Opportunities*

Workbook produced by the Pacific Northwest Pollution Prevention Resource Center, 513 First Ave.  
West, Seattle, WA 98119  
phone: 206-352-2050, fax: 206-352-2049, e-mail: office@pprc.org, WWW address:  
<http://www.pprc.org>

A joint project of the Small Business Assistance Programs in Alaska, Idaho, Oregon and Washington  
and funded by a grant from the U.S. Environmental Protection Agency.

---

### **REVIEW AND FILL OUT BEST MANAGEMENT PRACTICES CHECKLIST**

Consider best management practices (BMPs) as mandatory steps your business will take to maximize your competitiveness. These are a good collection of small efforts that you should follow to the best of your ability. Each practice will take only a small investment in time and/or money to implement. Added together, these practices will help ensure your operation is running efficiently and staying in compliance with the law. In addition, the BMPs will eliminate many wasteful practices that, taken as a whole, cost a significant amount of money.

Use the Best Management Practices Checklist below to make sure you are following each practice. Start by making sure you are following all of the inventory management practices. These are practices that any business, including wood furniture manufacturers, should follow. Then, take the BMPs and see that you are following the relevant steps. If there are relevant steps that you are not currently following, then work with your co-workers to implement these new practices. Make any needed small purchases, make changes to any manuals or notebooks, and then have a brief meeting to explain the new practices to be followed and their benefits. If there are a number of new practices that you plan to implement, integrate them into operations in manageable chunks, to minimize the mistakes that can occur whenever changes are made to the way things are customarily done.

### **Best Management Practices Checklist**

The Best Management Practices (BMPs) listed below are provided to assist your shop in managing and minimizing wastes associated with your facility's manufacturing process. Go through the list to see which BMPs you are already following, and check them off. Then, identify additional BMPs that could be implemented. Once these additional BMPs have been implemented, check them off as well.

## A. LUMBER RECEIVING, DRYING AND STORAGE

- \_\_\_ Arrange lumber delivery to minimize inventory and storage time
- \_\_\_ Inspect and sort lumber
- \_\_\_ Separate lumber by kiln sticks when stacking
- \_\_\_ Use stick guides for the proper alignment of kiln sticks
- \_\_\_ Provide adequate dry shed capacity and environment
- \_\_\_ Improve boiler efficiency

## B. ROUGH END AND GLUING

- \_\_\_ Remove defects from rough lumber efficiently
- \_\_\_ Recycle wood waste and sawdust
- \_\_\_ Use correct glue type
- \_\_\_ Use proper gluing techniques

## C. ASSEMBLY - MACHINING AND SANDING

- \_\_\_ Keep sanding belts and machine tools clean

## D. FINISHING OPERATIONS

### **1. Inventory Management and General Chemical Handling**

- \_\_\_ Centralize responsibility for storing and distributing solvents, cutting fluids and machine oils
- \_\_\_ Check materials for damage and expiration date upon receipt
- \_\_\_ Follow the storage instructions of all materials to prevent spoilage
- \_\_\_ Manage your chemical supplies using earliest purchased, first used approach
- \_\_\_ Test expired chemicals, oils and fluids
- \_\_\_ Participate in a "refillable tote" program
- \_\_\_ Use spigots and funnels to reduce spills
- \_\_\_ Store chemicals properly
- \_\_\_ Provide "spill kits"
- \_\_\_ Keep waste chemistries segregated to allow for reuse and recycling

### **2. Paint Technician Training**

- \_\_\_ Train all spray painters in proper painting techniques
- \_\_\_ Inspect parts before painting them to prevent painting obvious rejects
- \_\_\_ Educate employees on calculating precise thinner to paint ratios
- \_\_\_ Prepare coatings properly
- \_\_\_ Take new approaches to furniture repair

### 3. Process Controls

- Use heat to obtain desired coating viscosity
- Regularly maintain spray equipment
- Evaluate equipment cleaning demands
- Recycle or distill all waste gun wash solvent
- Flush equipment first with dirty solvent before final cleaning with virgin solvent
- Clean equipment immediately
- Use equipment that uses pressurized pulses of solvent and compressed air
- Paint with light colors before dark ones
- Change colors less frequently when painting

### E. PACKING, SHIPPING AND WAREHOUSE

- Evaluate damage history
- Evaluate packaging water resistance
- Reduce toxic metals content of packaging materials
- Minimize volume and weight of packaging materials
- Develop reusable containers
- Improve compatibility of packaging materials for recycling
- Recycle other waste produced in packing, shipping and warehousing

### F. BUILDING AND EQUIPMENT MAINTENANCE

#### 1. Inventory Management and General Chemical Handling

- Centralize responsibility for storing and distributing solvents, cutting fluids and machine oils
- Check materials for damage and expiration date upon receipt
- Follow the storage instructions of all materials to prevent spoilage
- Manage your chemical supplies using earliest purchased, first used approach
- Test expired chemicals, oils and fluids
- Participate in a "refillable tote" program
- Use spigots and funnels to reduce spills
- Store chemicals properly
- Provide "spill kits"
- Keep waste chemistries segregated to allow for reuse and recycling

#### 2. General Controls

- Use synthetic lubricating oils with longer life
- Keep chemical wastes segregated
- Use wood ash as a soil conditioner
- Recycle oils
- Maintain kiln and controls
- Prevent spills
- Properly manage shop rags and towels

- \_\_\_ Change automotive fluids properly
- \_\_\_ Use appropriate areas for vehicle and other equipment parts washing/steam cleaning
- \_\_\_ Maintain outdoor parking areas

## Pollution Prevention Preparation Checklist

\_\_\_ 1. Establish a small group of people in the facility to sit down and have a waste minimization brainstorming session.

- Complete the [waste inventory worksheets from Chapter 1](#) of this workbook to make it easy to identify problem areas.
- Gather information on the costs of buying and disposing of the higher- volume/more-hazardous products used.
- Represent a cross-section of responsibilities in the meeting group.

\_\_\_ 2. Determine (from the group's input) the top three wastes (in terms of cost and quantity generated).

Three wastes streams most expensive to manage:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Three waste streams with the highest amount generated:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

From the above lists, focus on one item for your first pollution prevention effort. As time permits, evaluate opportunities to eliminate or reduce the second- and third-ranked waste streams, and so on. Once you have addressed the above-listed waste streams, implement additional pollution prevention opportunities (on the following pages) until you can achieve zero discharge and emission status.

If you find the ability to drastically reduce waste streams, you deserve some recognition. There are many federal, state and local recognition programs that reward good environmental performers. Many companies who participate in these recognition programs find the publicity good for business, because more and more consumers and customers support environmentally conscious businesses.

---

***Contact Pinellas County's Pollution Prevention and Resource Recovery (P2R2) Program at 464-4761 for Waste Reduction Assistance***