College of Forestry 600: Workshops and Shop Tools

Safety Policy & Procedure Manual
Section 600: Workshops and Shop Tools
Effective: 01 January 2007
Revised: August 2014

PURPOSE

The purpose of this section is to provide information to help protect employees and students from the health hazards presented by workshops and both power and hand tools in the shop environment.

Background Information

Workers performing in shop conditions using power and hand tools are regulated under Oregon Administrative Rules Oregon Occupational Safety and Health Division, Division 2. Most all activities in workshops will be covered under sub-sections N, O, P, and Q.
General

1. **Eye protection** shall be worn at all times when operating power equipment and tools. Safety glasses should have the Z87.1 logo on them to assure they are industrial quality.

2. **Report all equipment defects** immediately. Do not use unsafe equipment until it is repaired.

3. When **disconnecting equipment**, pull on the plug, not the cord. Whenever the use of electrical extension cords is required, keep them clean, dry, and free from kinks. Protect them from oil, hot or sharp surfaces, and chemicals. Exterior cords should not be extended across aisles, through water, doors, or into areas where they are apt to be damaged.

4. **Use tools properly.** Always use proper-sized tools and equipment for the job. Use each tool only for the job for which it was intended. Forcing a small tool to do the job of a large one may result in injury or tool damage. Never use a screwdriver to see if electrical circuits are hot. Never use a machinist's hammer in place of a carpenter's hammer. Do not strike a hardened steel surface, such as an anvil, with a steel hammer because a small piece of steel may break off and injure someone. Be sure wrenches fit properly. Never use pliers in place of a wrench. Never strike wrenches with hammers. Pull on wrenches, do not push. When sawing secure the material in the saw vise.

5. **Do not leave power tools unattended while in operation.**

6. Portable electric circular and band saws shall not be used unless the **guard mechanism** is functioning properly.

7. Oversized drill bits shall not be ground to fit smaller electric drills.

8. **Wear proper clothing.** This varies depending on the type of hand tool you are working with. Work clothing should not be loose, baggy, or highly flammable. To protect against burns, wear clothing such as coveralls, high-top shoes, leather aprons and leather gloves. Remove all paper from pockets and wear cuffless pants. When working with heavy metals wear hard-toed shoes with non-skid soles. Avoid wearing synthetic clothing because it has a low flashpoint, which can result in severe burns. Do not wear jewelry. It can get caught in moving parts.

9. **Protect your hair, scalp, and head.** Pull back long hair in a band or a cap to keep it from getting caught in tools. Be extremely careful with long hair when using a drill or drill press. When handling carpentry materials wear a hard hat or bump cap to protect your head.

10. **Watch your fingers.** Take special care when hammering so that you strike the object, not your fingers.

11. **Keep your mind on your work.** Avoid horseplay and loud talk. Loud talking as well as pushing, running, and scuffling while working with hand tools can cause serious accidents. Be alert and work defensively.

12. **Keep work area and tools clean.** Dirty, greasy, and oily tools and floors can cause accidents. Clean and put away all unneeded tools and materials. Clean up spills and scraps from the floor and equipment. Keep paths to exits clear. If conditions are dusty, use a respirator.
13. **Keep cutting-edge tools sharp.** Dull cutting-edge tools are dangerous, as they require excessive pressure and hammering to make them cut. When cutting always cut away from the body. Before using any cutting tool, remove nails or other objects that might destroy the tool's cutting edge.

14. **Carry and store tools properly.** All sharp-edge tools and chisels should be carried with the cutting edge down. Never carry sharp tools in a pocket. Store all sharp-edge cutting tools with the sharp edges down.

15. **Inspect tools before using.** Avoid using damaged tools. Tools that appear to be damaged or have broken handles should be marked unsafe. Do not use them until they have been repaired.

16. **Grip tools firmly.** Hold hand tools securely so that they do not slip and hit someone. Do not wear gloves--they are bulky and make gripping tools difficult.