# Chapter 21 Machine and Tool Safety

#### A. References

a. SPPM: 2.71, Machinery Safeguards.
SPPM Equipment Safety and Machinery Safeguards.htm

b. WAC: 296-806, Machine Safety.

WAC Chapter 296-806

c. WAC 296-807, Portable Power Tools.

WAC Chapter 296-807

d. WAC Chapter 296-155, Part G, Tools Hand and Power WAC 296-155-360

## B. Scope

This chapter establishes safe work practices while operating machines and/or tools. Machines, tools and their moving parts present a workplace hazard. Installed and used properly, protective safeguards, engineering controls and administrative controls protect workers by helping to reduce machine and tool hazards.

Protective safeguards and engineering controls are generally physical barriers that either enclose or isolate machine and tool hazards. Safeguarding requirements are specific to the hazard(s) controlled and safeguarding methods used to control the hazard(s). Method and equipment specific requirements are further detailed in the WAC(s) referenced above. Examples of protective safeguards and engineering controls include: machine/tool guards, blade guards, railings, auto braking and shut off devices, ventilation equipment, etc. Examples of administrative controls include: job rotation, work practices, warning signs, etc.

### C. Responsibilities

## **Supervisors are responsible to ensure:**

- Machines and tools in the workplace are assessed for hazards and required PPE.
- Required personal protective equipment is documented on a Workplace Hazard Assessment Form such as: Hazard Assessment Certification Form Chapter 24 Appendix A.
- Employees are trained how to use PPE and engineering controls, and follow administrative controls. PPE, engineering and administrative control training shall be documented on a Training Certification Form such as PPE Training Certification Chapter 24 Appendix B.
- Employees are trained in the proper and safe use of machines and tools and their protective safeguards and engineering controls in accordance with the manufacturer's instructions and <u>WAC Chapter 296-806</u>, <u>WAC Chapter 296-807</u> and <u>WAC 296-155-360</u> requirements.
- Machines and tools are equipped with appropriate safeguards and safeguard are used per <u>WAC Chapter 296-806</u>, <u>WAC Chapter 296-807</u>and <u>WAC 296-155-360</u>.

- Inspection checklists are developed for machines, tools, protective safeguards and engineering controls in accordance with manufacturer's and applicable WAC (requirements) and they are periodically inspected and the inspection documented, filed and retained as specified in Chapter 16.
- Machines and stationary and portable tools with reported inadequate or non-functioning safeguards and/or engineering controls are tagged with a hazard notification sign or an out-of-service sign, and when necessary removed from the use area or disconnected from its power source.
- Employees conform to the following requirements.

## **Employees who use machines shall:**

- Inspect and confirm operation of machine and tool safeguards prior to each use in accordance with applicable WAC requirements.
- Disconnect the energy source using the lockout procedure when inspecting or maintaining machines and tools in accordance with Chapter 20 LOCKOUT TAGOUT of this APP Manual.
- Use machines, tools and protective safeguards in accordance with the manufacturer's instructions.
- Maintain machine and tool safeguards in accordance with WAC for Machine Safety at: WAC Chapter 296-806, WAC Chapter 296-807 and WAC 296-155-360.
- Use applicable personal protective equipment when operating machines and tools in accordance with the applicable hazard assessment training and the manufacturer's instructions.
- Only remove safeguards during maintenance, service, and repairs when power sources are disconnected and controlled in accordance with Chapter 20 LOCKOUT TAGOUT of this APP Manual.
- Return all safeguards to their correct location and confirm operation after maintenance activity is complete.
- Do not to wear loose clothing, neckties, rings, or other jewelry which could be caught or entangled in moving parts.
- Wear caps, hair nets, or other protection which confines hair that is long enough to be caught or entangled in moving parts.
- Report all machine and tool hazards and non-functioning safeguards to supervisor immediately and disconnect and lockout the energy source and tag out the machine with an out of service label.

## D. Training

Training will be provided to workers once at the time of hire and documented and retained in accordance with Chapter 30: SAFETY AND HEALTH TRAINING.

Re-training will be required when:

- There have been changes in the workplace, such as introducing new processes and/or equipment;
- Changes in the types of machines, tools or equipment;

 And/or when an employee exhibits inadequate knowledge, skill and understanding or non-conforming use of the machine, tool or equipment.

Training will require participants to demonstrate an understanding of the operating instructions, the safety requirements for using the machine and tool and a proficiency using the machine and tool while applying safety measures. Training information will include:

- Inspection requirements prior to the use of each machine and tool;
- The hazards associated with the machine and tool;
- The required safeguards, controls and general safety procedures for each machine and tool used; and.
- The required PPE and its use related to each machine and tool referencing APP Manual Chapter 24.

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