APPENDIX V: TRAINING GUIDE - PORTABLE POWER TOOL SAFETY

Effective dissemination of safety information is an integral part of the Injury and Illness Prevention Program. This document was created to facilitate worker safety training. Training must be completed before the use of any tool or piece of equipment, exposure to any hazardous conditions, and/or when new hazards are identified.

In Preparation for this meeting (items needed):

- Training Documentation Form
- Two Portable Power tools
- Operator's Manuals or Job Safety Analyses for the tools
- List of Personal Protective Equipment (PPE) assigned

Introduction

Employees who use portable power tools may potentially be exposed to the hazards of falling, flying, abrasive, and splashing objects, and to harmful dusts, fumes, mists, vapors, or gases. They must be provided with the appropriate personal protective equipment. All electrical connections for these tools must be suitable for the type of tool and the working conditions (e.g., wet, dusty, flammable vapors). When a temporary power source is used for construction, a ground-fault circuit interrupter should be used.

Employees should be trained on the proper use of all tools. Workers should be able to recognize the hazards associated with the different types of tools and the necessary safety precautions.

Discussion Topics:

- Does your workplace have records showing that all employees received training on the operations of each power tool that is in use? If not, then take the time to go through and provide training on at least two power tools that the employees use in your workplace. (A separate training must be held to cover all of your portable power tools. Training for each power tool must be documented and include the information stated above.)

Types of Power Tools

Power tools are classified by their power source and include: electrical, pneumatic, liquid fuel, hydraulic, and powder actuated tools. Some of the potential hazards of power tools include electric shock, which is specific to electric powered tools, while other hazards such as moving parts are general to all power tools.

Fortunately, most tools are designed with safety in mind. Manufacturers are careful to address safety issues in regard to their tools and usually provide users' manuals with specific instructions on the use of tools in the manner that they were designed. To ensure that the tools are designed and manufactured properly, Cal/OSHA requires that all power tools include guards, switches and controls, an electrical grounding plug, be double insulated, and have maintenance guidelines. If the tool you are using has broken or missing guards, switches, or grounding conductors, then do not use the tool. Remember the following when using power tools with guards:

- Safety guards must never be removed when a tool is being used.

- All projections on revolving or reciprocating edges must be flush or guarded.
- Tools with wheels, blades, sanding, and grinding parts must be guarded.

Discussion Topics:

- What are the different types of power tools in use at your facility?
- Do all of your portable power tools meet the guidelines required by OSHA? (i.e., guards, switches and controls, grounding plug or double insulated, maintenance guidelines)

General Safety Precautions

Employees who use hand and power tools and who are exposed to the hazards of falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases, must be provided with the proper personal protective equipment necessary to protect them from the hazard.

All hazards involved in the use of power tools can be prevented by following five basic safety rules:

1. Keep all tools in good condition with regular maintenance.
2. Use the right tool for the job.
3. Examine each tool for damage before use.
4. Operate tools according to the manufacturer's instructions.
5. Provide and use the proper protective equipment.

Employees and employers have a responsibility to work together to establish safe working procedures. If a hazardous situation is encountered, work should be stopped as soon as possible and the situation should be brought to the attention of the supervisor immediately.

Discussion Topics:

- What hazards are you exposed to when using portable power tools and what PPE do you wear to protect you against these hazards?
- Are portable power tools being inspected before each use? If not, why not? If yes, remember to document the maintenance or repair of all power tools in your machinery maintenance log.

Key Takeaway Points

- Effective written procedures and training are essential in portable power tool safety.
- Always check the tool before use for any visible damage or alteration.
- Never use a tool that is damaged or has been altered.
- Always use adequate personal protective equipment that will both protect the worker and allow for a firm grip or hold during use.