**SHOP PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**HAZARD ASSESSMENT GUIDE**

**Purpose and Description**

The Shop Personal Protective Equipment (PPE) Hazard Assessment Guide identifies hazards to which shop workers may be exposed and specifies PPE to protect against hazards during work operations. When completed, the document and its associated training will satisfy the PPE Hazard Assessment and Certification as required in Washington Administrative Code (WAC) 296-800-160 by the Labor & Industries Department of Occupational Safety and Health (DOSH).

This document must be completed by the shop safety coordinator or their designee. This person must conduct a hazard assessment that is specific to operations in their shops. EH&S personnel are available to assist with the hazard assessment, and may be reached at 206.543.7262. The shop safety coordinator is responsible for ensuring the PPE identified in this hazard assessment is being properly utilized by shop employees and shop users.

Identifying hazards in the shop should be routine, and the shop should take active steps to eliminate all of the identified hazards. PPE alone should not be relied on to provide protection for employees and shop users. PPE is considered the LAST line of defense, after other measures have been taken to eliminate, reduce or minimize exposure. Engineering controls, administrative controls and training should all be used prior to using PPE wherever possible.

**This Hazard Assessment Guide consists of two sections.**

Section 1: Shop PPE Hazard Assessment and Certification

Section 2: PPE Training Documentation

**Section 1: Shop PPE Hazard Assessment**

The shop safety coordinator or their designee will conduct and certify the hazard assessment.

1. Identify the tasks in the shop that expose users to hazards. Hazards in the shop may include physical hazards like noise, welding, rotating equipment, hot work, electricity, compressed gases and chemical hazards (flammable, toxic, or corrosive solids and liquids). The Shop PPE Hazard Assessment Guide will assist in identifying operations where PPE is needed to protect shop users from exposures to hazards during the tasks. Check the applicable box in the guide if the task is performed.
2. For each task performed, mark the applicable box(es) to indicate the specific required PPE. As needed, provide additional information under the Notes section.
3. Record the completed hazard assessment by filling out the form and signing below.

**SHOP HAZARD ASSESSMENT AND PPE**

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| Shop Safety Coordinator Name (Print Name):  | Department/Unit:  |
| Building(s):  | Room(s):  |
| Phone: |  |
| Completed by (Print Name):  | Signature: | Date  |
| Signature of Shop Safety Coordinator:  | Date  |



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|  **Section 1. PHYSICAL HAZARD PROTECTION**  |
| [x]  **Minimum PPE** |
| **Eyes**: Safety Glasses | **Hands**: None, dependent upon the task | **Body:** Long sleeves with tight fitting cuffs, long pants, or equivalent leg covering (no loose clothing); Shop footwear (no open-toe or open heel shoes). |
| **(√ ) If Perform Task** | **Task Description****(Modify wording to fit your needs)** | **Potential Hazards** | **PPE Designated For Shop Specific Tasks** | **Notes** |
|  | Use rotating equipment | Injury from being struck,Get caught in moving parts | [ ]  **Minimum PPE** | Restrain hair, remove jewelry and no loose clothing |
|  | Use saws and cutting equipment | Cuts LacerationsAmputations | [ ]  **Minimum PPE** | Restrain hair, remove jewelry and no loose clothing |
|  | Work with compressed gases | AsphyxiationToxic gas exposure |  [ ]  **Minimum PPE** | Take special precautions in unventilated spaces |
|  | Maintain and repair electrically powered equipment | Electric shock | [ ]  **Minimum PPE**[ ] Coveralls[ ] Insulated gloves [ ] Electrical isolation mat | Implement Lockout/Tagout procedures  |
|  | Work with hand tools on sharp sided materials (such as wood or metal) or equipment  | CutsLacerationsAmputations | [ ]  **Minimum PPE**[ ]  **Gloves** |  |
|  | Work with machines or equipment that produce noise above 85 dBA  | Exposure to hazardous noise levelsHearing/ear damage | [ ]  **Minimum PPE**[ ] Ear plugs or ear muffs | Contact EHS for noise assessment  |

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|  | Welding or hot work, work with ultraviolet radiation, exposure to noise, welding fumes and/or electric arc welding | ConjunctivitisCorneal damageSkin burnsFlash burnsHearing/ear damageWelding fume feverElectric shock | [ ]  **Minimum PPE**[ ] Welders hood, UV face shield and/or goggles with proper shades[ ] Leather safety toed shoes[ ] Head cover[ ] Ear plugs or ear muffs[ ] Respirator with HEPA cartridges or supplied air if necessary | Fire extinguisherContact EHS for welding fume assessment or noise exposure assessment to determine proper respiratory or hearing protection.  |

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|  **Section 2. CHEMICAL PROTECTION**  |
| [x]  **Minimum PPE** |
| **Eyes**: Safety glasses, goggles if there is a splash potential | **Hands**: Chemical resistant gloves appropriate for the chemical being used (consult the safety data sheet). | **Body:** Long pants, shirt, or equivalent leg covering (no shorts, no loose clothing); Shop footwear (no open-toe or open heel shoes). |
|  **(√) If Perform Task** | **Task Description****(Modify wording to fit your needs)** | **Potential Hazards** | **PPE Designated For Shop Specific Tasks** | **Notes:**  |
|  | Work with degreasers, corrosives or other toxic liquids | Potential inhalation, skin or eye damagePotential poisoning or damage through skin contact | [ ]  **Minimum PPE**[ ]  **Eyes and/or Face**: Where splashing may occur, use safety goggles or safety glasses **and** a face shield[ ]  **Inhalation Hazard:** Wear respiratory protection |  |
|  | Work with machine oils, coolant, etc.  | Potential inhalation, skin or eye damagePotential poisoning or damage through skin contact | [ ]  **Minimum PPE**[ ]  **Eyes and/or Face**: Where splashing may occur, use safety goggles or safety glasses **and** a face shield[ ]  **Inhalation Hazard:** Wear respiratory protection | Cutting fluids can become contaminated with metals, and can support the growth of microorganisms. Use of barrier creams can help prevent skin penetration or irritation. |
|  |  Spill cleanup | Potential skin, eye or respiratory damage | [ ]  **Minimum PPE**[ ]  **Body:** Shop coat and chemical resistant apron[ ]  **Foot:** Shoe covers, as needed[ ]  **Eyes**: Where splashing may occur, use safety goggles [ ]  **Face**: Where splashing may occur, use safety goggles or safety glasses **and** a face shield[ ]  **Inhalation Hazard:** Wear respiratory protection | Wear PPE specific for chemical spill cleanup.Refer to chemical spill cleanup procedures in specific chemical SOP.**For a large spill, follow required procedures:*** Call 911 for assistance
* Report all injuries and fires
* Call EH&S for assistance
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|  | List any other particularly hazardous shop tasks involving chemicals | Conduct risk assessmentHazard depends on task and chemical properties Check safety data sheet information | [ ]  **Minimum PPE**[ ] If chemicals used, wear chemical resistant apron[ ]  **Inhalation hazard:** Wear respiratory protection [ ]  **Shop Hood:** Work in chemical fume hood | (Note: Best practice to perform work in chemical fume hood)  |

**ADDITIONAL GUIDANCE ON PPE SELECTION**

1. **PPE Inspection, Maintenance, and Decontamination**. All PPE should be inspected prior to, during and after use. Re-usable equipment must be decontaminated or disposed of if it is not feasible to decontaminate.
2. **Shop Footwear.** Shop footwear provides protection against physical hazards and covers the entire foot from the toes to the ankle. Avoid sandals, flip flops, flats, athletic shoes and canvas/breathable fabric tops.
3. **Hearing Protection.** Ear plugs or muffs provide protection against hazardous noise levels. When there is potential for hazardous noise levels contact EHS for an exposure assessment. If employees are exposed to 85 dBA for an 8 hour TWA (Time weighted average) period, make sure they receive Hearing Loss Prevention training and receive annual hearing testing.
4. **Airborne/Inhalation Hazard, Engineering Controls, and Respiratory Protection**. When materials have a potential for becoming airborne, use a chemical fume hood, local exhaust (snorkel) or other engineering control whenever possible. Activities that generate airborne contaminants or odors that are not conducted using local exhaust or some other engineering control (such as at the workbench) should be evaluated to determine if the activity presents an inhalation hazard.
5. If respiratory protection is identified as a necessary control during the hazard assessment, users must be enrolled in the UW Respiratory Protection Program. This includes EH&S performing a respirator-specific hazard assessment, as well as having all users undergo a medical evaluation to wear a respirator, respirator training and respirator fit testing. Contact EH&S at 206.221.7770 or uwresp@uw.edu for assistance in these steps. Guidance is available at: [www.ehs.washington.edu/workplace/respiratory-protection](http://www.ehs.washington.edu/workplace/respiratory-protection)
6. **Chemical-Resistant Gloves**. Chemical-resistant gloves must be selected based on the specific chemical(s) used and the glove manufacturer’s permeation and compatibility charts. Guidance is available at: [www.ehs.washington.edu/resource/laboratory-safety-manual-510](http://www.ehs.washington.edu/resource/laboratory-safety-manual-510)

**Section 2: PPE Training Documentation**

PPE training must be conducted by the shop safety coordinator or their designee. Training will identify and discuss potentially hazardous tasks performed in the shop, and selection and use of shop specific PPE to protect the shop worker or researcher***. The training content, instructor and attendees must be documented***. To provide adequate training, the shop safety coordinator or their designee will provide the following:

1. The shop safety coordinator or their designee will review the completed Shop PPE Hazard Assessment Guide with the employee. It describes the operations in the shop where employees need PPE for protection against exposure to hazards. In this step, the hazard assessment is used as a training tool. While discussing shop operations and the associated hazards with shop staff, the shop safety coordinator will address the following:
	* How the shop obtains PPE
	* What types of PPE are used in the shop and for which tasks
	* Where and how the PPE is stored and maintained
	* How to put on, wear, adjust for proper fit, and remove PPE
	* How to properly use the PPE
	* Discuss any limitations of the PPE
	* General PPE safety practices, including not wearing PPE outside of shops (e.g. hallways and eating areas)
2. Each trained shop staff member will sign the training documentation to acknowledge that they have reviewed the Shop PPE Assessment Guide and have received training.
3. Conduct refresher training whenever the hazard assessment and/or PPE selected for use is updated.

**Shop PPE Hazard Assessment Guide Training Acknowledgement**

Shop Safety Coordinator: Department/Unit:

Building: Room:

Trainer: Trainer Job Title:

***I have read, asked questions and understand the PPE requirements for the activity/materials described for my work.***

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| **Date** | **Name of Person Trained** | **Job Title** | **Employee or****Student ID Number**  | **Signature** |
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