

University of Alaska Anchorage	Section EHS/RM
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## 1. Purpose

University of Alaska Anchorage (UAA) employees, student workers, faculty, staff, and outside contractors who perform work on UAA property may be required to wear personal protective equipment (PPE) for specific tasks. PPE is designed to protect personnel from injuries or illnesses resulting from contact with chemical, radiological, physical, or electrical, mechanical or other workplace hazards. This PPE program is intended to ensure workers are knowledgeable in the hazards when performing their job and the PPE available to protect themselves and others.

## 2. Objective

UAA, in its continuing effort to provide personnel with safe, healthful working conditions, and to comply with the Occupational Safety and Health Act is implementing the following program for PPE to protect people working at the University, by helping employees, student workers, faculty, staff, and outside contractors better understand the equipment available to better protect themselves.

## 3. Scope

This policy applies to UAA employees, student employees, faculty, staff, and outside contractors working on UAA equipment who are exposed to job hazards that required the use of PPE.

## 4. Definitions

Face Shield - a device worn in front of the eyes and a portion of, or all of, the face. Its main function is to protect the eyes and face

Goggle - A device with a tight seal to the face, worn over the eyes to prevent chemical protection or greater protection from other eye hazards.

Hard Hat - A rigid cap that is work to provide protection for the head, against impact, flying particles, or electric shock depending on the rating. Hard hats are held in place by a suitable suspension adjustable to the wearers head.

Personal Protective Equipment (PPE) - Clothing which provides a physical barrier between a person and a known hazard.

Side Shield - A device or metal or plastic fixed firmly to the fram of the safety glasses to protect the eye from side exposure.

## 5. Authority and Responsibilities

In addition to the roles and responsibilities outlined in the UAA Training Program, the following apply to the PPE Safety Program.

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#### EHS/RM

- Develop and periodically review the PPE program
- Provide assistance to departments for PPE assessments and selection

#### Supervisor

- Conduct PPE assessment to ensure proper PPE is used in their department
- Ensure the proper PPE is made available to personnel in their department
- Ensure personnel are properly trained in the use and care of provided PPE
- Conduct periodic observations of PPE use in their department to verify required PPE is used and effective
- Identify when new hazards are introduced which may require a change in PPE requirements
- Provide replacements when PPE becomes compromised

#### Department Safety Coordinator

- Assist in department PPE assessment
- Conduct periodic inspections of PPE use and effectiveness in their departments
- Notify supervisor when it is noted that PPE is insufficient and assist in correction

#### Employees

- Visually inspect PPE prior to every use for defects and damage
- Alert department supervisor when additional or reduced PPE may be required
- Assess work to determine PPE is adequate
- Properly care for provided PPE

#### Outside Contractors

- Perform all work in compliance with their company's hot work program, which will be reviewed and approved by the EHS/RM department
- If the company does not have a program, they must comply with this program

### **6. Hazards**

PPE is worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. PPE may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

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## 7. Engineering Controls

Engineering controls are design plans or changes to the working environment to prevent or reduce personnel exposure to hazards. The following example of engineering controls should be considered to minimize the use of PPE requirements:

- Installation of equipment to minimize handling
- Installation of ventilation
- Accessibility of proper tools equipment or machinery to be used in place of PPE

## 8. Administrative Controls

Administrative controls are safe work practices and procedures designed to reduce the risks associated with workplace hazards. PPE will be implemented as an additional means for protection or only when engineering and administrative controls are not feasible. Examples of administrative controls include the following:

- Train personnel who perform work requiring PPE
- Routine inspections of work areas to where PPE is required
- Immediate removal of any flammable or combustibles from a hot work area
- Provide personnel with the proper tools and equipment to complete work safely
- When feasible, use alternative methods to avoid work activities requiring PPE.

The following procedures will be followed regarding PPE use at UAA

## 9. PPE Assessments:

Each department must determine the need for PPE by completing PPE assessments using the PPE Assessment Form (Appendix A) for specific areas, or tasks. The goal of the assessment is to identify physical and health hazards that will require the use of PPE. A copy of the PPE Assessment Form will be kept by the department, and a copy provided to the EHS/RM. When possible, plans should be made to eliminate hazards through the use of engineering and administrative controls before the use of PPE is authorized.

When evaluating PPE types, it is important to consider factors such as the hazard, tasks to be performed, conditions present, duration of use, and any obstruction the PPE may cause.

When it is determined PPE is required, it must be provided at no cost to personnel required to use it. Everyday clothing such as long sleeve shirts, long pants and street shoes/ normal work boots are not considered PPE and do not need to be provided to the personnel by UAA.

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## 10. PPE Requirements:

### Hand Protection

Proper hand protection should be work anytime a UAA personnel hands could be exposed to chemical, cuts, puncture, thermal hazards.

Specialty gloves appropriate to the job hazard may be required for certain high risk jobs (see Table below).

Hazard	Glove Type
General Duty (rough objects, chips, sparks)	Leather
Extremely Sharp edges	Cut resistant
Welding	Leather Welder Gloves – Gauntlet Style (to cover wrists)
Heat and Flame	Hot mill or aluminized
High Vibration	Padded or shock absorbing
Chemical/Biological Exposure	Chemical Resistant
Electrical Work	Appropriate Arc Flash Rated depending on Glove

### Eye Protection

Eye protection should be required for personnel anytime they are working in areas that has particles, flying objects, dust, or chemical/biological exposures.

All eye protection should be in compliance with ANSI standards and is typically signified by a Z87.1 stamp located on the PPE.

- Safety glasses with side shields should be used anytime there is exposure to flying particles or potential for minimal chemical/ biological materials.
- Goggles provide a seal around the eyes and should be used when there is risk of chemical splashes, corrosive vapors, or flying particles.
- Face shields can be worn in conjunction with safety glasses or goggles to provide greater protection to the eyes and face from chemical and particle hazards.
- Welding masks will be used during any welding or arc producing activity.
- personnel who wear prescription lenses must have eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription or protective lenses.

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### **Foot Protection**

Anytime there is a risk of injury to an employee's feet as a result of falling or rolling objects, objects piercing the sole and electrical hazards. The following types of foot protection should be considered when performing the PPE assessment:

- **Full toed shoes** should be required in all areas where minor work is taking place where minimal protection to the employee's feet are required
- **Safety toed boots** will be required to protect the feet from falling or rolling objects
- **Slip resistant shoes** are required in areas where work must be performed on slick surfaces including wet, oily and greasy walking surfaces. Also consider the use of slip resistant mats etc. to prevent slips in these areas
- **Metatarsal guards or shoe coverings** can add additional temporary protection against falling objects and can be used in conjunction with safety toed shoes, or for short duration non-frequent tasks
- **Ice cleats** that can be affixed to boots or shoes can be used during cold weather to improve traction on ice and snow

### **Head Protection**

Head protection will be furnished to, and used by, all personnel engaged in miscellaneous work where overhead hazards are present. Head protection is also required to be worn by engineers, inspectors, and visitors at construction sites when hazards from falling or fixed objects, or electrical shock are present.

All head protection except bump caps should be ANSI approved and have a Z89.1 stamp located on the equipment.

- **Bump Caps** are designed to protect personnel from minor head bumps and lacerations but are not intended to protect from falling or flying objects. These should be used in areas where there is risk of and personnel hitting their head on stationary objects such as piping, low ceilings or hanging items.
- **Class C Hard Hats** are designed to provide protection of the head from falling objects but provide no electrical insulation
- **Class G Hard Hats** are meant for general use and rated for 2,200 volts.
- **Class E Hard Hats** provide protection from falling objects and are intended to reduce the danger of exposure to high voltage electrical conductors. They are rated for 20,000 volts

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### **Clothing**

Specific types of clothing may be required to further protect personnel from other types of hazards including the following:

- **High visibility vests** may be required in areas with heavy vehicle traffic or airports.
- **Fire resistant clothing** may be required for work involving welding, brazing, torch cutting or other task where personnel is exposed to flames or high temperatures
- **Cold weather gear** will be required anytime personnel are expected to work in extremely cold temperatures
- **Chemical resistant clothing** may be required for work with chemical or biological agents. This may include lab coats or aprons in laboratory settings.
- **Light weight disposable coveralls** are used to keep general dust and dirt off personnel clothing and prevent from spreading the material to other areas

### **Respiratory Protection**

Respiratory protection is covered under the UAA Respiratory Protection Program. It is important to remember that there are additional requirements for personnel anytime respiratory protection is required including medical clearance and respirator fit tests. The UAA Respiratory Protection Program must be referenced, and the EHS/RM notified if required.

### **Hearing Protection**

Hearing protection is also covered under a separate UAA program. If there is the possibility hearing protection is required, EHS/RM should be contacted to do a noise assessment of the specific task or area, to determine whether hearing protection is required under the hearing protection program.

### **Cleaning and Maintenance**

It is important that all PPE be kept clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE should be inspected, cleaned, and maintained at regular intervals so that the PPE provides the requisite protection. Personal protective equipment shall not be shared between personnel until it has been properly cleaned and sanitized. PPE should be distributed for individual use whenever possible.

It is also important to ensure that contaminated PPE which cannot be decontaminated is disposed of in a manner that protects personnel from exposure to hazards.

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## 11. Inspections

Inspections of PPE should occur:

- Prior to every use, workers will visually inspect their PPE to ensure proper working condition. All PPE must be intact and adequate to protect from expected hazards. Any time PPE is compromised and unsafe for use, it must be disposed of and new PPE provided.
- Periodically EHS/RM department, supervisors and safety coordinators will observe personnel using PPE during the course of their job. Personnel will be coached on the proper use of the PPE if necessary and it should be determined if the PPE used is adequate for the area or task.

## 12. Training

UAA shall provide a training to each employee assigned PPE. Training must be provided to personnel prior to using the PPE.

Training must include:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust and wear PPE
- Limitations of PPE
- Proper care, maintenance and duration of use of the PPE

### Retraining

When the employer has reason to believe that personnel that have already been trained does not have the understanding and skill required to properly adhere to this program they shall be retrained. Retraining should take place in the following conditions:

- Changes in the workplace render previous training obsolete
- Changes in the types of PPE to be used
- Inadequacies in affected personnel's knowledge or use of assigned PPE indicate that personnel have not retained the requisite understanding or skill.

## 13. Program Evaluation

The PPE Program shall be evaluated on an annual basis utilizing the protocols set forth by EHS/RM. The evaluation team will consist of a department safety coordinator and a designee from EHS/RM. EHS/RM will define the scope of the evaluation. The final report will be developed by the EHS/RM utilizing the information received during the evaluation. The

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deficiencies determined in the report will be documented and corrective action plans will be developed.

#### 14. References

OSHA and ANSI regulations that apply to welding and hot work are included below.

- ANSI Z41-1991, "Personnel Protection - Protective Footwear".
- ANSI Z87.1-1989, "Practice for Occupational and Educational Eye and Face Protection".
- ANSI Z89.1-1986, "Safety Requirements for Industrial Head Protection".
- 29 CFR 1910.132, "General Requirements"
- 29 CFR 1910.133, "Eye and Face Protection"
- 29 CFR 1910.135, "Head Protection"
- 29 CFR 1910.136, "Occupational Foot Protection"
- 29 CFR 1910.138, "Hand Protection"

#### 15. Revision History

Revision Number	Date Revised	Description of Change	Revised By	Approved By
0	10/25/2018	Initial Issue		VC Shuford
1				
2				
3				



## Appendix A PPE Assessment Form

Use this form to determine applicable PPE for employees performing specific tasks or working in specific areas. Multiple forms may be used, as needed, to include all tasks and work areas.

Department:

Job Task/Activities:

Work Location(s):

Assessment completed by:

Title:

Date:

Signature:

Target	Hazard											Recommended PPE	Hazards Identified/ Comments	
	Impact	Cuts/Penetration	Pinch/Crush/Roll Over	Thermal (Hot Cold)	Light (Optical) Radiation	Chemical	Biological	Harmful Dust	Electrical	Noise	Other			None
Hand														
Eye														
Foot														
Head														
Clothing														
Respiratory														Contact EHS/RM for Assistance
Hearing														Contact EHS/RM for Assistance