

USD 224 CLIFTON-CLYDE **PERSONAL PROTECTIVE EQUIPMENT PLAN**

I. Purpose

This Personal Protective Equipment Plan is necessary to provide a safe and healthful workplace for our employees, and to comply with Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.132. The purpose of this plan is to ensure the safety and health of our employees using personal protective equipment.

II. General Program Management

A. Responsibility

The Safety Officer will assess the workplace to determine if hazards are present, or likely to be present, which will necessitate the use of personal protective equipment.

All employees have the responsibility to comply with company policies on the use of personal protective equipment.

B. Program Review and Update

The personal protective equipment plan will be reviewed or updated whenever there is new equipment or personnel changes that might affect the plan.

III. Methods of Compliance

A. Hazard Assessment and Equipment Selection

When hazards are present, or likely to be present, the Safety Officer will:

- Select and have each affected employee use the types of personal protective equipment that will protect them from the hazards identified in the hazard assessment.
- Communicate selection decisions to each affected employee.
- Select Personal Protective Equipment that properly fits each affected employee.

Damaged and defective personal protective equipment shall not be used.

B. Training

The Safety Officer will provide training to each employee who is required to use personal protective equipment. Each employee will be trained to know at least the following:

- When personal protective equipment is necessary;
- What personal protective equipment is necessary;
- How to properly put on, take off, adjust, and wear the personal protective equipment;
- The limitations of the personal protective equipment;
- The proper care, maintenance, useful life and disposal of personal protective equipment.

When the Safety Officer has reason to believe that any affected employee, who has already been trained, does not have the understanding and skill required to use the personal protective equipment, the Safety Officer will retrain such employee.

Circumstances where retraining is required include, but are not limited to:

- Changes in the workplace render the previous training obsolete or,
- Changes in the types of personal protective equipment to be used that render previous training obsolete or,
- Inadequacies in an affected employee's knowledge or, usage of the equipment.

Each affected employee will demonstrate an understanding of the training and the ability to use personal protective equipment properly, before being allowed to perform work requiring the use of personal protective equipment.

The Safety Officer will verify that each affected employee has received and understood the required training through a written certification that contains: (Appendix A)

- the name of each employee trained,
- the date(s) of training, and
- that identifies the subject of the certification.

CERTIFICATION

PERSONAL PROTECTIVE EQUIPMENT TRAINING

USD 224 Clifton-Clyde certifies that on _____,
Date

_____ completed training on
Employee's Name

Equipment Trained On

Instructor's Name

Title

CERTIFICATION

HAZARD ASSESSMENT EVALUATION

USD 224 Clifton-Clyde certifies that on _____
Date

that _____ completed a hazard evaluation on

SEE ATTACHED HAZARD ASSESSMENT FORMS

Supervisor's Name

Title

HAZARD ASSESSMENT FORM AND Guidelines for Selecting Personal Protective Equipment (PPE)/Work Practices (WP)

INSTRUCTIONS: Photocopy this form (front and back) and keep the original for future hazard assessments. Use the copy as a guide for your walk-through survey. It will help you identify the hazards and preventive measures in each work area.

Area: _____ Job Classification: _____ Date: _____ Assessor: _____
Note: Personal Protective Equipment alone should not be relied on to provide protection against hazards, but should be used in conjunction with guards, engineering controls and sound manufacturing practices.

- ❶ Familiarize yourself with the potential hazards in the area and then the types of PPE-WP that are available.
- ❷ Consider the hazards associated with the environment (impact velocities, masses, projectable shape, radiation intensities, etc.).
- ❸ Select PPE-WP that ensures a greater level of protection than the minimum required to protect workers from the hazards.
- ❹ Fit the worker with the PPE and give instructions on its use and care. It is very important that workers be made aware of all warning labels for and limitations of their PPE.
- ❺ Responsibility for PPE-WP use is the employee's, positive reinforcement is the supervisor's.



HEAD HAZARDS: Tasks that can cause head hazards include: Working below other workers who are using tools and materials which could fall, working on energized electrical equipment, working with chemicals, and working under machinery or processes which might cause materials or objects to fall.
 Job: _____ Description of Hazards: _____

Check the appropriate box for each hazard:

Burn	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	PPE - WP: _____
Chemical Splash	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Electrical Shock	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Impact	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____



EYE HAZARDS: Tasks that can cause eye hazards include: Working with acids and chemicals, chipping, grinding, furnace/boiler operations, sanding, welding and woodworking.
 Job: _____ Description of Hazards: _____

Check the appropriate box for each hazard:

Chemicals	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	PPE - WP: _____
Dust	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Heat	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Impact	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Light/Radiation/Laser	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Biological	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____



HAND HAZARDS: Tasks that can cause hand hazards include: Cutting material, working with chemicals and working with hot objects.
 Job: _____ Description of Hazards: _____

Check the appropriate box for each hazard:

Burns	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	PPE - WP: _____
Chemical Exposure	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Cuts/Abrasion	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Puncture	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____
Biological	.....Yes <input type="checkbox"/>	No <input type="checkbox"/>	_____



FOOT HAZARDS: Tasks that can cause foot hazards include: Carrying or handling materials that could be dropped, performing manual material handling and working with chemicals.

Job: _____ Description of Hazards: _____

Check the appropriate box for each hazard:

Chemical Exposure Yes No PPE - WP: _____
Compression Yes No _____
Impact Yes No _____
Puncture Yes No _____



HEARING HAZARD: Tasks that can cause hearing hazards include: Mowing, maintenance work, shop activities, printing, folding and boiler rooms.

Job: _____ Description of Hazards: _____

Impact Noise PPE - WP: _____
 Levels above 85db _____
 Levels above 90db _____



INHALATION HAZARD: Tasks that can cause inhalation hazards include: moving, spraying, smoke from surgery (cautery, laser, etc.), chemical fumes, sawdust, glues and biological agents (like TB).

Job: _____ Description of Hazards: _____

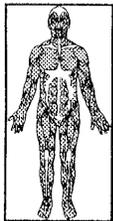
Biological PPE - WP: _____
 Dust _____
 Fumes _____



RADIATION HAZARDS: Tasks that can cause radiation exposure include all ionizing radiation diagnostics and treatments (including fluoroscopy), nonionizing including laser treatments and diagnostics, diathermy and other forms of microwaves.

Job: _____ Description of Hazards: _____

Gamma Ray PPE - WP: _____
 X Ray _____
 Beta Ray _____
 Microwave _____
 Laser visible/invisible _____



MUSCULOSKELETAL HAZARDS: Tasks that can cause musculoskeletal hazards include keyboarding, lifting, turning, twisting, slipping, pushing, pulling and other muscle stressors.

Job: _____ Description of Hazards: _____

Strains PPE - WP: _____
 Sprains _____
 Repetitive Motion _____
 Slip & Fall _____

Appendix B

1. Controlling hazards. PPE devices alone will not be relied on to provide protection against hazards, but will be used in conjunction with guards, engineering controls, and sound manufacturing practices.

2. Assessment and selection. It is necessary to consider certain general guidelines for assessing the foot, head, eye, face, and hand hazard situations that exist in an occupational or educational operation or process, and to match the protective devices to the particular hazard. It should be the responsibility of the safety officer to exercise common sense and appropriate expertise to accomplish these tasks.

3. Assessment guidelines. In order to assess the need for PPE the following steps will be taken:
 - a. Survey. Conduct a walk-through survey of the areas in question. The purpose of the survey is to identify sources of hazards to workers and co-workers. Consideration should be given to the basic hazard categories:
 - (a) Impact
 - (b) Penetration
 - (c) Compression (roll-over)
 - (d) Chemical
 - (e) Heat
 - (f) Harmful dust
 - (g) Light (optical) radiation

 - b. Sources. During the walk-through survey the safety officer should observe:
 - (a) sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects;
 - (b) sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc.;
 - (c) types of chemical exposures;
 - (d) sources of harmful dust;
 - (e) sources of light radiation, i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.;
 - (f) sources of falling objects or potential for dropping objects;
 - (g) sources of sharp objects which might pierce the feet or cut the hands;
 - (h) sources of rolling or pinching objects which could crush the feet;
 - (i) layout of workplace and location of co-workers; and
 - (j) any electrical hazards. In addition, injury/accident data should be reviewed to help identify problem areas.

- c. Organize data. Following the walk-through survey, it is necessary to organize the data and information for use in the assessment of hazards. The objective is to prepare for an analysis of the hazards in the environment to enable proper selection of protective equipment.
 - d. Analyze data. Having gathered and organized data on a workplace, an estimate of the potential for injuries should be made. Each of the basic hazards (paragraph 3.a.) should be reviewed and a determination made as to the type, level of risk, and seriousness of potential injury from each of the hazards found in the area. The possibility of exposure to several hazards simultaneously should be considered.
4. Selection guidelines. After completion of the procedures in paragraph 3, the general procedure for selection of protective equipment is to:
- a) Become familiar with the potential hazards and the type of protective equipment that is available, and what it can do; i.e., splash protection, impact protection, etc.;
 - b) compare the hazards associated with the environment; i.e., impact velocities, masses, projectile shape, radiation intensities, with the capabilities of the available protective equipment;
 - c) select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards; and
 - d) fit the user with the protective device and give instructions on care and use of the PPE. It is very important that end users be made aware of all warning labels for and limitations of their PPE.
5. Fitting the device. Careful consideration must be given to comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued wearing of the device is more likely if it fits the wearer comfortably. Protective devices are generally available in a variety of sizes. Care should be taken to ensure that the right size is selected.
6. Devices with adjustable features. Adjustments should be made on an individual basis for a comfortable fit that will maintain the protective device in the proper position. Particular care should be taken in fitting devices for eye protection against dust and chemical splash to ensure that the devices are sealed to the face. In addition, proper fitting of helmets is important to ensure that it will not fall off during work operations. In some cases a chin strap may be necessary to keep the helmet on an employee's head. (Chin straps should break at a reasonably low force, however, so as to prevent a strangulation hazard). Where manufacturer's instructions are available, they should be followed carefully.
7. Reassessment of hazards. It is the responsibility of the safety officer to reassess the workplace hazard situation as necessary, by identifying and evaluating new equipment and processes, reviewing accident records, and reevaluating the suitability of previously selected PPE.

8. Selection chart guidelines for eye and face protection. Some occupations (not a complete list) for which eye protection should be routinely considered are: carpenters, electricians, machinists, mechanics and repairers, millwrights, plumbers and pipe fitters, sheet metal workers and tinsmiths, assemblers, sanders, grinding machine operators, lathe and milling machine operators, sawyers, welders, laborers, chemical process operators and handlers, and timber cutting and logging workers. The following chart provides general guidance for the proper selection of eye and face protection to protect against hazards associated with the listed hazard "source" operations.

Eye and Face Protection Selection Chart

SOURCE	ASSESSMENT OF HAZARDS	PROTECTION
IMPACT-chipping, grinding machining, masonry work, woodworking, sawing, chiseling, power fastening, riveting, and sanding.	Flying fragments, objects, large chips, particles sand, dirt, ect..	Spectacles with side protection, goggles, face shields. See notes (1), (3), (5), (6), (10). For severe exposure, use faceshield.
HEAT-Furnace operations, pouring, casting, hot dipping, and welding.	Hot sparks	Faceshields, goggles, spectacles with side protection. For severe exposure use faceshield. See notes (1), (2), (3).
	Splash from molten metals	Face shields worn over goggles. See notes (1), (2), (3).
	High temperature exposure	Screen face shields, reflective face shields. See notes (1),(2), (3).
CHEMICALS-Acid and chemical handling, degreasing plating	Splash	Goggles, eyecup and cover types. For severe exposure, use face sheild. See notes (3), (11).
	Irritating mists	Special purpose goggles
DUST-Woodworking, buffing, general dusty conditions	Nuisance dust	Goggles, eyecup and cover types. See note (8).

SOURCE	ASSEMENT OF HAZARDS	PROTECTION
<p>LIGHT and/or RADIATION- Welding:Electric Arc</p> <p>Welding:gas</p> <p>Cutting, Torch brazing, Torch soldering</p> <p>Glare</p>	<p>Optical Radiation</p> <p>Optical radiation</p> <p>Optical radiation</p> <p>Poor vision</p>	<p>Welding helmets or welding shields. Typical shades: 10-14. See notes (9) (12).</p> <p>Welding goggles or welding face shield. Typical shades: gas welding 4-8, cutting 3-6, brazing 3-4. See note (9).</p> <p>Spectacles or welding face shields. Typical shades, 1.5-3. See notes (3) (9).</p> <p>Spectacles with shaded or special-purpose lenses, as suitable. See notes (9), (10).</p>

Notes to Eye and Face Protection Selection Chart:

- (1) Care should be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards should be provided. Protective devices do not provide unlimited protection.
- (2) Operations involving heat may also involve light radiation. As required by the standard, protection from both hazards must be provided.
- (3) Faceshields should only be worn over primary eye protection (spectacles or goggles).
- (4) As required by the standard, filter lenses must meet the requirements for shade designations in 1910.133(a)(5). Tinted and shaded lenses are not filter lenses unless they are marked or identified as such.
- (5) As required by the standard, persons whose vision requires the use of prescription (Rx) lenses must wear either protective devices fitted with prescription (Rx) lenses or protective devices designed to be worn over regular prescription (Rx) eyewear.
- (6) Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. It should be recognized that dusty and/or chemical environments may represent an additional hazard to contact lens wearers.

- (7) Caution should be exercised in the use of metal frame protective devices in electrical hazard areas.
- (8) Atmospheric conditions and the restricted ventilation of the protector can cause lenses to fog. Frequent cleansing may be necessary.
- (9) Welding helmets or faceshields should be used only over primary eye protection (spectacles or goggles).
- (10) Non-sideshield spectacles are available for frontal protection only, but are not acceptable eye protection for the sources and operations listed for "impact."
- (11) Ventilation should be adequate, but well protected from splash entry. Eye and face protection should be designed and used so that it provides both adequate ventilation and protects the wearer from splash entry.
- (12) Protection from light radiation is directly related to filter lens density. See note (4) . Select the darkest shade that allows task performance.

9. Selection guidelines for head protection. All head protection (helmets) is designed to provide protection from impact and penetration hazards caused by falling objects. Head protection is also available which provides protection from electric shock and burn. When selecting head protection, knowledge of potential electrical hazards is important. Class A helmets, in addition to impact and penetration resistance, provide electrical protection from low-voltage conductors (they are proof tested to 2,200 volts). Class B helmets, in addition to impact and penetration resistance, provide electrical protection from high-voltage conductors (they are proof tested to 20,000 volts). Class C helmets provide impact and penetration resistance (they are usually made of aluminum which conducts electricity), and should not be used around electrical hazards.

Where falling object hazards are present, helmets must be worn. Some examples include: working below other workers who are using tools and materials which could fall; working around or under conveyor belts which are carrying parts or materials; working below machinery or processes which might cause material or objects to fall; and working on exposed energized conductors.

Some examples of occupations for which head protection should be routinely considered are: carpenters, electricians, linemen, mechanics and repairers, plumbers and pipe fitters, assemblers, packers, wrappers, sawyers, welders, laborers, freight handlers, timber cutting and logging, stock handlers, and warehouse laborers.

10. Selection guidelines for foot protection. Safety shoes and boots which meet the ANSI Z41-1991 Standard provide both impact and compression protection. Where necessary, safety shoes can be obtained which provide puncture protection. In some work situations, metatarsal protection should be provided, and in other special situations electrical conductive or insulating safety shoes would be appropriate. Safety shoes or boots with impact protection would be required for carrying or handling materials such as packages, objects, parts or heavy tools, which could be dropped; and, for other activities where objects might fall onto the feet. Safety shoes or boots with compression protection would be required for work activities involving skid trucks (manual material handling carts) around bulk rolls (such as paper rolls) and around heavy pipes, all of which could potentially roll over an employee's feet. Safety shoes or boots with puncture protection would be required where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal etc., could be stepped on by employees causing a foot injury.
11. Selection guidelines for hand protection. Gloves are often relied upon to prevent cuts, abrasions, burns, and skin contact with chemicals that are capable of causing local or systemic effects following dermal exposure. OSHA is unaware of any gloves that provide protection against all potential hand hazards, and commonly available glove materials provide only limited protection against many chemicals. Therefore, it is important to select the most appropriate glove for a particular application and to determine how long it can be worn, and whether it can be reused.

It is also important to know the performance characteristics of gloves relative to the specific hazard anticipated; e.g., chemical hazards, cut hazards, flame hazards, etc. These performance characteristics

should be assessed by using standard test procedures. Before purchasing gloves, the employer should request documentation from the manufacturer that the gloves meet the appropriate test standard(s) for the hazard(s) anticipated.

Other factors to be considered for glove selection in general include:

- (A) As long as the performance characteristics are acceptable, in certain circumstances, it may be more cost effective to regularly change cheaper gloves than to reuse more expensive types; and,
- (B) The work activities of the employee should be studied to determine the degree of dexterity required, the duration, frequency, and degree of exposure of the hazard, and the physical stresses that will be applied.

With respect to selection of gloves for protection against chemical hazards:

- (A) The toxic properties of the chemical(s) must be determined; in particular, the ability of the chemical to cause local effects on the skin and /or to pass through the skin and cause systemic effects;
- (B) Generally, any "chemical resistant" glove can be used for dry powders;
- (C) For mixtures and formulated products (unless specific test data are available), a glove should be selected on the basis of the chemical component with the shortest breakthrough time, since it is possible for solvents to carry active ingredients through polymeric materials; and,
- (D) Employees must be able to remove the gloves in such a manner as to prevent skin contamination.

12. 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.

For the purposes of compliance with 1910.132 (a) and (b), PPE should be inspected, cleaned, and maintained at regular intervals so that the PPE provides the requisite protection.

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