

CENTER FOR INSTRUCTION, TECHNOLOGY AND INNOVATION (CiTi)

PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM

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Purpose

The purpose of this program is to assist CiTi in providing a safe work environment for employees; due to the responsibilities of their position, may be exposed to potentially hazardous materials, potentially hazardous equipment or, duties that could potentially expose the employee to other preventable physical exposure or injury. This program also assists in the documentation of hazard assessment, protective measures in place, and PPE that is being used.

While OSHA's Personal Protective Equipment regulation 29 CFR 1910.132-.140 (Subpart I), does not explicitly require a written Personal Protective Equipment (PPE) Program, CiTi has developed a written PPE Program to document and specify all information relative to their PPE needs. Under the provisions of the regulation, employers must evaluate each job function to determine if PPE is necessary to protect workers. To comply with this standard, CiTi has completed a Job Hazard Analysis (JHA) for specific job responsibilities. Please refer to Appendix A for more details.

PPE is not a substitute for more effective control methods and its use will be considered only when other means of protection against hazards are not adequate or feasible. It will be used in conjunction with other controls unless no other means of hazard control exist.

Personal protective equipment will be provided, used, and maintained when it has been determined that its use is required to ensure the safety and health of our employees and that such use will lessen the likelihood of occupational injury and/or illness.

Personal Protective Equipment program components include:

- Responsibilities of supervisors and employees
- Hazard assessment and PPE selection
- Employee training
- Cleaning and Maintenance of PPE

Responsibilities

The Director of Facilities is the program coordinator, acting as a representative that has the overall responsibility for the program. The CiTi programs will work with the CiTi Safety & Risk personnel to assist in the training of employees and selection of appropriate PPE. Copies of this program may be obtained from the Safety & Risk Department.

Director of Facilities

The Director of Facilities in conjunction with the Safety & Risk Service is responsible for the development, implementation, and administration of the PPE policies which involves:

- Conducting workplace hazard assessments to determine the presence of hazards which necessitate the use of PPE.
- Selecting and purchasing PPE.
- Reviewing, updating, and conducting PPE hazard assessments whenever
 - o a job changes
 - o new equipment is used
 - o there has been an accident
 - o a supervisor or employee requests it
 - or at least every year
- Maintaining records on hazard assessments
- Maintaining records of PPE assignments and training.
- Providing training, guidance, and assistance to supervisors and employees on the proper use, care, and cleaning of approved PPE.
- Periodically re-evaluating the suitability of previously selected PPE.
- Reviewing, updating and evaluating the overall effectiveness of PPE use, training, and policies.

Supervisors

Supervisors have the primary responsibility for implementing and enforcing PPE use and policies in their work area. This involves:

- Providing appropriate PPE and making it available to employees.
- Ensuring that employees are training on the proper use, care, and cleaning of PPE.
- Ensuring that employees properly use and maintain their PPE, and follow PPE policies and rules.
- Notifying management when new hazards are introduced or when processes are added or changed.
- Ensuring that defective or damaged PPE is immediately disposed of and replaced.

Employees

The employee is responsible for following PPE policies. This involves:

- Properly wearing PPE as required.
- Attending required training sessions.
- Properly caring for, cleaning, maintaining and inspecting PPE as required.
- Following PPE policies and rules.
- Informing the supervisor of the need to repair or replace PPE.

Employees who repeatedly disregard and do not follow PPE policies and rules will be subject to disciplinary procedures, if applicable.

Job Hazard Analysis

A full job hazard analysis (JHA) will be completed for job tasks which present a hazard to employees. The following steps are considered during the assessment:

Potential hazards considered during the Job Hazard Analysis include the following:

- Biological/Chemical Types of biological/chemical exposures such as splash, vapor, spray, or immersion that could cause chronic illnesses or physical injury.
- Compression/Pinch Points Sources of falling objects or potential for dropping objects that could pose a compression or projectile hazard to the hands, face, feet, or head.
- Harmful Dusts/Mists/Fumes/Gases Sources of harmful dust that can accumulate or become airborne and cause physical hazard to the employee's eyes. Check Material Safety Data Sheet/Safety Data Sheet (MSDS/SDS) for information relating to airborne hazards.
- Heat/Cold Sources of high/low temperatures that may result in burns, eye
 injury, or ignition of protective equipment.
- Impact Sources of rolling or pinching objects which could crush the feet.
- Light (optical radiation)/UV Sources of light radiation, such as welding, brazing, cutting, furnaces, heat treating, high intensity lights.
- Noise Find sources of equipment which may exceed OSHA Standard of 85 decibels for an eight hour day.
- Other Sources of motion-machinery or processes where an injury could result from tool movement, machine parts or particles, or personnel movement that could result in collisions, or tripping on stationary objects.
- Penetration Sources of sharp objects which might pierce the feet or cut the hands.

The following sources and/or activities were also considered:

- Chemical Exposure and/or Usage
- Electrical, Hydraulic, Pneumatic, Steam and Hot Water Hazards
- Falling Objects or potential dropping objects
- Flying Objects
- Harmful Dusts (during grinding, blasting and painting, etc.)
- Hazards associated with mowing and grounds work
- Layout of work area/Elevated work areas/Restrictive Work Areas (i.e., confined space)
- Light Radiation and hot work (welding, cutting & brazing)
- Motion (machinery)
- Rolling or pinching objects
- Sharp Objects (during cutting, drilling, wood/metal working)
- Temperatures (both indoor and outdoor exposure)

Completion of a JHA will take into consideration hazards that employees may encounter which cannot be removed by engineering controls, work practices, or administrative methods. Appropriate PPE will be purchased relative to the hazards employees may encounter based on information obtained during the JHA. Training will be provided to all employees relative to the types of PPE used.

Procedures

A. Hazard Assessment for PPE

The Safety & Risk Service, will conduct a walk-through survey of each work area to identify sources of work hazards. Each survey will be documented, which identifies the work area surveyed, the person conducting the survey, findings of potential hazards, and date of the survey. Forms will be kept with the PPE written plan.

The Safety & Risk Service will conduct, review, and update the hazard assessment for PPE whenever:

- A job changes
- New equipment or process is installed
- There has been an accident
- Whenever a supervisor or employee requests it
- Or at least every year

B. Selection of PPE

Once the hazards of a workplace have been identified, the Citi program, in conjunction with the Safety & Risk Service will determine if the hazards can first be eliminated or reduced by methods other than PPE, i.e., methods that do not rely on employee behavior, such as engineering controls.

If such methods are not adequate or feasible, then the program in conjunction with the Safety & Risk Service will determine the suitability of the PPE presently available; and as necessary, will select new or additional equipment which ensures a level of protection greater than the minimum required to protect our employees from the hazards. Care will 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 will be recommended for purchase.

All personal protective clothing and equipment will be of safe design and construction for the work to be performed and will be maintained in a sanitary and reliable condition. Only those items of protective clothing and equipment that meet NIOSH or ANSI (American National Standards Institute) standards will be procured or accepted for use. Newly purchased PPE must conform to the updated ANSI standards which have been incorporated into the PPE regulations, as follows:

- Eye and Face Protection ANSI Z87.1-1989
- Head Protection ANSI Z89.1-1986
- Foot Protection ANSI Z41.1-1991

 Hand Protection (There are no ANSI standards for gloves, however, selection must be based on the performance characteristics of the glove in relation to the tasks to be performed.)

Affected employees whose jobs require the use of PPE will be informed of the PPE selection and will be provided PPE by CiTi at no charge. Careful consideration will be given to the comfort and proper fit of PPE in order to ensure that the right size is selected and that it will be used.

General Information on Personal Protective Equipment

PPE devices alone should not be relied on to provide protection against hazards, but can be used in conjunction with guards, engineering controls and administrative methods.

<u>Fitting the device:</u> careful consideration must be given to comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued use of PPE is more likely, if it fits comfortably.

<u>Devices with adjustable features:</u> 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 the 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 they will not fall off during work operations. Where manufacturer instructions are available, they should be followed carefully.

Personal Protective Equipment

Once the assessment has been completed and potential hazards are determined for each employee that requires PPE, the following types of equipment will be mandated for use:

- 1. Eye and Face Protection: Employees that may be exposed to eye and/or facial injury from flying particles, molten metal, liquid chemicals, acids and/or other caustic liquids, chemical gases or vapors, or potentially damaging light radiation, will be required to wear a type of PPE appropriate for that particular task. All protective eye and face equipment purchased after July 5, 1994 shall comply with ANSI Standard: Z87.1-1989, or be equally effective. Equipment purchased prior to that date shall comply with ANSI Standard Z87.1-1986, or be equally effective.
- 2. <u>Head Protection:</u> Employees that may be exposed to injuries to the head due to falling objects, or, having the head come in contact with fixed objects, will be required to wear head protection when performing those tasks or duties. The head protection required will be commensurate with the task or duties performed. All head protection will comply with ANSI Z89.1-1986, or be equally effective. When the task or duty exposes the employee to a potential electrical

- hazard, metal head protection will not be used. Head protection of a non-conductive material (High Impact Plastic), will be worn in these situations.
- 3. Hand Protection: Employees engaged in any tasks or duties that may subject them to injuries of the hand including lacerations, abrasions, punctures, chemical, or thermal burns will be required to wear appropriate hand protection. While this will not eliminate injuries to the hand, it will reduce the probability of such an injury. The selection of hand protection will be commensurate with the tasks or duties the employee is required to perform.
- 4. Foot Protection: Employees that are engaged in tasks or duties where they may be subjected to injuries to the foot from puncture or compression will be required to wear foot protection that complies with ANSI Z41-1991, or be equally effective. Where electrical hazards are present, protective foot wear must be manufactured using non-conductive materials. Where a chemical hazard exists, such as stripping of floors, where the feet may come in contact with hazardous chemicals, protective covers with treads will be provided and required.
- <u>Other/Miscellaneous:</u> When employees are engaged in tasks or duties that present a specific hazard such as excessive dust, splashing liquid, etc., appropriate PPE, such as dust masks, etc. will be provided.

Training

Any worker required to wear PPE will receive training in the proper use and care of the PPE before being allowed to perform work requiring the use of PPE. Periodic retraining will be offered to PPE users as needed. The training will include, but not necessarily be limited tom, the following subject:

- When PPE is necessary to be worn
- What PPE is necessary
- How to properly don, doff, adjust, and wear PPE
- The limitations of the PPE
- The proper care, maintenance, useful life, and disposal of the PPE

Training will be conducted for all workers, at appointment, and as changes in operations or job assignments as deemed necessary.

Employees should be instructed to review the Product Label and Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) and owners/operators manuals of any product they may use to complete various job duties. Reasons for referring to the documents is to enable them to follow the manufacturer's directions for required PPE. Examples of equipment include the following: safety glasses and goggles, gloves (rubber latex/vinyl, nitrile/chemicals resistant or leather gloves), head protection, footwear, hearing protection (plugs and/or ear muffs), work clothing, chemical aprons, face shields, welding helmets and vests, leather chaps, and respirators.

Retraining

The need for retraining will be indicated when:

- an employee's work habits or knowledge indicates a lack of the necessary understanding, motivation, and skills required to use the PPE (i.e., uses PPE improperly)
- new equipment is installed
- changes in the work place make previous training out-of-date
- changes in the types of PPE to be used make previous training out-of-date

Cleaning and Maintenance of PPE

It is important that all PPE be kept clean and properly maintained. PPE should be inspected, cleaned, and maintained at regular intervals so that the PPE provides the proper protection. It is also important to ensure that single use PPE be disposed of in a manner that protects employees from exposure to hazards.

Personal protective equipment must not be shared between employees until it has been properly cleaned and sanitized. PPE will be distributed for individual use whenever possible.

If employees provide their own PPE, make sure that it is adequate for the work place hazards, and that it is maintained in a clean and reliable condition.

Defective and damaged equipment shall not be used, and must be brought to the attention of your supervisor to ensure the defective equipment is replaced. It is the responsibility of the individual using the equipment to ensure that PPE is cleaned and stored in such a manner to prevent contamination and to dispose of the equipment when it has become worn or is defective in any way. Defective or damaged PPE will not be used and will be immediately discarded and replaced.

Department supervisors are expected to periodically monitor the selection of PPE to determine if adjustments need to be made or alternative PPE be provided, depending on the job duties. The purpose is to insure a protective barrier remains between the employee and the assessed hazard.

NOTE: Defective equipment can be worse than no PPE at all. Employees would avoid a hazardous situation if they knew they were not protected; but they would get closer to the hazard if they erroneously believed they were protected, and therefore would be at greater risk.