

## CHAPTER 6 PERSONAL PROTECTIVE EQUIPMENT

### 6.1 INTRODUCTION

The use of personal protective equipment (PPE) is required in some parts of the Laboratory for protection of workers from various occupational hazards. PPE is not a substitute for adequate engineering or administrative controls and should be used only if no other measures are adequate or feasible. PPE typically includes: gloves, coveralls, eye protection, respirators, etc. Respirators will be covered separately in Chapter 7. Hearing protection will be discussed in Chapter 8.

### 6.2 SCOPE

This section covers the selection, care, and use of personal protective equipment at PPPL, and applies to all Laboratory personnel, contractors and subcontractors. Certain forms of PPE related to Occupational Safety are covered in Section 9.1, such as safety glasses, safety shoes, and hard hats.

### 6.3 DEFINITIONS

6.3.1 Personal Protective Equipment (PPE) - Devices worn by the worker to protect against exposure to hazards in the environment.

6.3.2 Administrative Controls - Methods of controlling employee exposures by job rotation, work assignment, or time periods away from the hazard.

6.3.3 Attenuation - The reduction, expressed in decibels, of the sound intensity.

6.3.4 Engineering Controls - Methods of controlling employee exposures by modifying the source or reducing the quantity of contaminants released into the workroom environment.

6.3.5 Exposure - Contact with a chemical, biological, or physical hazard.

## 6.4 RESPONSIBILITIES

6.4.1 Department Chairmen/Division Heads are responsible for ensuring implementation of this section.

6.4.2 Line Supervisors are responsible for:

- A. Identifying, with the assistance of the Safety Office, those employees or jobs that may need PPE.
- B. Enforcing the use of PPE in areas where its use is required.
- C. Ensuring that the PPE is used in accordance with instructions and training provided by the supervisor and the Safety Office.
- D. Ensuring that the proper PPE is on hand in sufficient amounts for employees and visitors.

6.4.3 The Safety Office is responsible for:

- A. Investigating, identifying, and evaluating hazards where PPE may be necessary.
- B. Arranging for instructions and training in the proper use of PPE.
- C. Assisting supervisors in the selection of the proper PPE.
- D. Monitoring to see if the PPE is being used properly.

8.6.4.4 All employees are responsible for:

- A. Wearing and using the PPE issued to them in accordance with instructions and training provided by the Safety Office and their supervisors.
- B. Cleaning, maintaining, and properly storing the PPE issued to them.
- C. Informing their supervisors of any personal health problem that would be aggravated by the use of PPE.
- D. Reporting any damaged PPE to their supervisor.

- E. Using only those types of PPE that have been designated for that job.

## 6.5 REQUIREMENTS

6.5.1 PPE shall be used only when the use of engineering and administrative controls are not feasible or effective.

6.5.2 PPE shall not be used in any area or job until the Safety Office evaluates the situation and designates the proper equipment.

## 6.6 PRACTICES AND PROCEDURES

### 6.6.1 Gloves

- A. The Laboratory's stockroom supplies both cloth and various rubber like gloves for distribution. Consult the Safety Office for the proper selection of glove material for the hazards involved.
- B. Cloth gloves should never be used when handling chemicals in any form.

### 6.6.2 Face and eye protection

- A. Face shields, welding masks, chemical splash goggles, and non-prescription safety glasses can be obtained in the Laboratory's stockrooms. See Table 8.6.1 for lens shades for welding masks and goggles.
- B. Prescription safety eyeglasses may be ordered at a reduced rate through the Safety Office (see Chapter 9.1.6).
- C. Supervisors shall ensure the use of eye and face protection in designated areas.
- D. Signs shall be posted in designated eye protection areas.
- E. Design, construction, testing and the use of devices for eye and face protection shall be in accordance with the American National Standard for Occupational and Educational Eye and Face Protection, Z87 (latest edition).

### 6.6.3 Foot protection

- A. Safety shoes - The Laboratory will reimburse the employee \$50.00 towards the purchase of safety shoes. The employee must get his/her supervisor's approval on forms provided by the stockroom (see Chapter 9.1.6). Safety shoes cannot be obtained at or through the Safety Office.
- B. Chemical resistant boots - These boots are not supplied by the stockrooms. Supervisors shall consult with the Safety Office Industrial Hygiene or Industrial Safety branches for selection and purchase (see Chapter 9.1.6).
- C. Other foot protection - Supervisors shall consult with the Safety Office for their particular needs.
- D. Safety-toe footwear - Employees shall have footwear which meet the requirements and specifications in the American National Standard for Men's Safety Toe Footwear, Z41.1 (latest edition).

6.6.4 Other protective clothing - the use of aprons, chemical suits, throw-away suits, shoe covers, etc. shall be evaluated by the Safety Office.

6.6.5 Respirators shall be selected, used, and maintained in accordance with Chapter 7.

6.6.6 Hearing Protection - The Laboratory's stockroom supply both ear muffs and ear plugs. Consult Chapter 8 on Noise and Hearing Conservation. All ear protection used shall meet the ANSI standard S3.19 (latest edition) to attenuate levels below that of the noise standard as stated in Chapter 8.