Personal Protective Equipment

Contents:

Introduction Definitions General Requirements General Personal Protective Equipment Guide

Introduction

The Occupational Safety and Health Act of 1970 was enacted to assure safe and healthful working conditions by assisting and authorizing States to enforce standards developed under the Act.

The North Carolina Department of Labor (NCDOL) Occupational Safety and Health Division adopted occupational safety and health standards promulgated under the Federal Standard, Subpart I - Personal Protective Equipment in North Carolina effective November 1, 1994.

Definitions

Hazard Assessment – the process of identifying physical and health hazards in the workplace via a facility walkthrough survey to develop a list of potential hazards in the following categories including but not limited to: impact, penetration, compression (roll-over), chemical, heat/cold, harmful dust, light (optical) radiation, and biological.

Personal Protective Equipment (PPE) - equipment needed to minimize exposure to hazards of processes or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact. Examples of PPE include such items as gloves, hardhats, aprons, face shields, boots, ear plugs (muffs), safety glasses, face shields, or other clothing that can provide protection from the working environment.

General Requirements

1. Employer Provided Personal Protective Equipment

To ensure the greatest possible protection for employees in the workplace, employers are responsible for:

- Performing a "hazard assessment" of the workplace to identify and control physical and health hazards.
- Identifying and providing appropriate PPE for employees.
- Training employees in use and care of PPE.

- Maintaining PPE, including replacing worn or damaged PPE.
- Periodically reviewing, updating and evaluating effectiveness of the PPE program.
- Paying for PPE.

2. Employee-Owned Personal Protective Equipment

Where employees provide their own protective equipment, the employer shall assure the employee:

- Properly wears PPE.
- Attends training sessions on PPE.
- Cares for, cleans and maintains PPE.
- Informs a supervisor of the need to repair or replace PPE.

3. Design

All personal protective equipment shall be of safe design and constructed for the work to be performed as recognized in regulatory or industry standards.

4. Special Conditions

There are special conditions that apply to the purchase of the following equipment:

(1) Eye Protection

Safety Glasses with Side Shields – 100% State funded except employees who wear prescription glasses shall pay for the cost of the examination.

- (2) Foot protection
 - (a) Safety Footwear State shall fund one pair per year, cost not to exceed dollar amount established biennially by the Office of State Budget and Management, which includes inflationary cost increase. Authorization for purchase required by employer management. Employee may purchase and be reimbursed by following State policy and agency procedures or the agency may supply safety footwear under rules of the Division of Purchase and Contract.
 - (b) Rubber and Specialized Safety Boots 100% State funded.

5. Hazard Assessment and Equipment Selection

The employer shall assess the workplace to determine if hazards are present, or likely to be present, and will necessitate the use of PPE. If such hazards are present, or likely to be present, the employer shall:

• Select and have each affected employee use types of PPE that

will protect the affected employee from hazards identified in the hazard assessment;

• Select PPE that properly fits each affected employee.

The employer shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated, the person certifying that the evaluation has been performed, the date(s) of the hazard assessment, and identifies the document as a certification of hazard assessment.

6. Defective and Damaged Equipment

Defective or damaged personal protective equipment shall not be used. It shall be tagged "DEFECTIVE DO NOT USE" or "DAMAGED UNSAFE DO NOT USE" and repaired to manufacturer specifications or disposed of to prevent future use.

7. Training

Before doing work that requires the use of PPE, employees must be trained. The employer shall provide training to each employee who is required to use PPE. Each employee shall be trained to know at least the following:

- When PPE is necessary.
- What type of PPE is necessary.
- How to properly don (put on), doff (take off), adjust, and wear PPE.
- The limitations of the PPE.

• The proper care, maintenance, useful life and disposal of the PPE. Each affected employee shall demonstrate an understanding of the training and ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

When the employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the employer shall retrain each such employee. Circumstances where retraining is required, includes but are not limited to the following situations:

• Changes in the workplace, rendering previous training obsolete.

- Changes in the type of PPE to be used, rendering previous training obsolete.
- Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

The employer shall verify that each affected employee has received and understands the required training through a written certification that contains the name of each trained employee, the date(s) of training, and identifies the subject of the certification.

GENERAL PERSONAL PROTECTIVE EQUIPMENT GUIDE

Reference: OSHA Occupational Safety and Health Standards

- General Industry Subpart I Personal Protective Equipment 1910.132 General Requirements
- Construction Industry Subpart E Personal Protective and Life Saving Equipment 1926.95 Criteria for Personal Protective Equipment

1. Eye & Face Protection - Must comply with Current Standard ANSI Z87.1-2003, ANSI Z87.1-1989 (R-1998) or ANSI Z87.1-1989. Reference: OSHA 1910.133/1926.102	Eye & Face PPE shall be distinctly marked to facilitate identification of the manufacturer. Safety eyewear must be determined as documented by the personal protective equipment hazard assessment for the employee's job.
a. **Safety Glasses 100% State Funded except that employees who wear prescription glasses pay for the cost of the examination. NOTE: All prescription safety glasses require side shields.	As required to protect employee from eye hazards, such as, optical radiation or glare when only frontal protection is required. Shaded or special purpose lenses may be required.
 b. **Safety Glasses with Side Shields –100% State Funded except that employees who wear prescription glasses pay for the cost of the examination. NOTE: All prescription safety glasses require side shields. 	As required to protect employees from flying fragments, objects, large chips, particles, sand, dirt, etc. For severe exposure, add face-shield over safety glasses.
c. Goggles/Cup Goggles - Direct Vent; Indirect Vent; No Vent Chemical/Dust Nuisance/Impact	As required to protect employees from impact, chemical splashes, mist, sprays or nuisance dust as documented by the personal protective equipment hazard assessment for the employee's job. For severe exposure, add face-shield over goggles.
 d. Welding Goggles/Welding Helmets – type and filter must be selected based on employee hazard assessment. Reference: OSHA 1910.133 (a) (5) Equipment with filter lenses must have the shade number appropriate for the work being performed for protection from injurious light radiation. – See Chart Filter Lenses for Protection Against Radiant Energy. 	As required to protect employees against eye hazards of welding, cutting, and brazing operations as documented by the personal protective equipment hazard assessment for the employee's job.
e. Face-shield – type must be selected based on employee hazard assessment.	As required to protect employee's eyes and face as documented by the personal protective equipment hazard assessment for the employee's job.
 2. Respirators – Compliant with OSHA Standards for respirators 1910.134, 1910.139, 1926.103, documentation must be met prior to assigning respirator to an employee. 	As required to protect employee following hazard assessment, engineering controls to reduce or eliminate the hazard and employee medical evaluation as required for use of respirator. Identify type of respirator as required to protect employee from airborne contaminants and conduct employee training and fit test as required.
3. Hand Protection Gloves – all types Reference: OSHA 1910.137-138/Glove Selection Chart	As required to protect employee from cuts, lacerations, punctures, biological, chemical,

	electrical hazard(s), environmental, physical, or
Gloves and other protective equipment used for electrical protection must be clearly marked as to class 00, 0,1,2,3,4,	radiation hazard.
and non-ozone resistant equipment other than matting shall	
be marked Type I. Ozone resistant equipment shall be	
marked Type II.	
Electrical Protective Equipment shall meet the (ASTM) D 120 Standard/International Standard 903 ITE-1988 for	
Rubber Insulating Gloves.	
4. Head Protection/Hard Hat Liners – OSHA Standards 1910.135/1926.100	As required to protect employee's head against impact and falling or flying objects and /or electrical hazards as documented by the personal
Reference: The current ANSI standard is ANSI Z89.1-2009	protective equipment hazard assessment for the employee's job.
	1 5 5
Type I – Protection from blows to the top of the head	Hard Hat Liners - As required to protect employee
Type II – Protection from blows to the top and sides of the head	against cold weather if hardhat is worn.
Class E (Electrical) are tested to withstand 20,000 volts	
Class G (General) are tested to withstand 2,200 volts	
Class C (Conductive) Provide no electrical protection	
5. Hearing Protection –	As required to protect employee against hearing loss due to noise as documented by the personal
Compliant with OSHA Standards for protection	protective equipment hazard assessment for the
against Occupational Noise Exposure exceeding	employees' job.
permissible limits found in 1910.95, 1926.52, and 1926.101.	
6. Body/Extremities – Chemical Resistant, Electrical	As required to protect employee from hazardous
Protection, Leather or Other Flame-Resistant	substances and / or exposure to electrical / heat /
Materials.	fire hazards as documented by the personal
	protective equipment hazard assessment for the
Gloves and other protective equipment used for electrical	employee's job.
protection must be clearly marked as to class 00, 0,1,2,3,4,	
and non-ozone resistant equipment other than matting shall	
be marked Type I. Ozone resistant equipment shall be	
marked Type II.	
7. Body Protection -	As required to protect employee against
Personal protective aprons, boot covers, (chain saw	biological, radiation, physical, chemical or
protective apparel) chaps, coats, pants, coveralls, suits and	electrical hazards. Base selection on information
vests in a range of suitable materials and sizes providing employee required protection factor.	as documented by the personal protective
Reference: Appropriate OSHA Standard(s)	equipment hazard assessment for the employees' job.
8. **Foot protection Safety Shoe -	As required to protect employee working in areas
a. State funds one pair per year, cost not to exceed dollar	where there is a danger of foot injuries due to
amount established biennially by the North Carolina	falling or rolling objects or objects piercing the
Office of State Budget and Management, which includes	sole or where protection is needed against
inflationary cost increase. Authorization for Purchase	electrical hazards as documented by the personal
required by employer management. Employee may	protective equipment hazard assessment for the
purchase and be reimbursed by	

STATE HUMAN RESOURCES MANUALWorkplace Environment, Health, Wellness & Work/Life Section 8, Page 8 Revised: June 27, 2017

Personal Protective Equipment (cont.)

following State policy and agency procedures or the agency may supply safety footwear under the rules of the Division of Purchase and Contract.	In general, does not apply to office employees.
NOTE: Protective footwear purchased shall comply with ASTM-F 2413 March 2005, "American Standard Test Method" for Personal Protective Footwear/OSHA 1910.136/1926.96.	
b. Rubber and Specialized Safety Boots -	As required to keep employee's feet dry when employee routinely works in wet locations such as flooded ditches and to protect from electrical hazards and/or other biological, chemical, cut hazards requiring specialized safety boots as documented by the personal protective equipment hazard assessment for the employee's job.
9. Safety Harnesses and Life Lines –	As required to protect employees from falling
Must meet current applicable OSHA and ANSI Standards	while working at elevated (4 feet or greater for general industry, 6 feet or greater for construction
Reference: OSHA Standards 1926.104 Safety belts, lifelines and lanyards 1926.105 Safety nets	locations not protected by standard guardrails or safety nets or as required when working in confined spaces.
10. Safety Nets - Fall Arrest Safety System -	As required to protect employees working over 6 feet or greater above ground or water surface
Reference: OSHA Standard 1926.104 Safety belts, lifelines and lanyards 1926.105 Safety nets	where other protective devices are impractical and conventional fall protection system cannot practically be used.
11. Personal Flotation Device (PDF)	As required for employees working over or near
(Life Jacket Flotation vest) -	water where the danger of drowning exists as documented by the personal protective equipment
Reference: OSHA 1926.106(a)	hazard assessment for the employee's job.
US Coast Guard Approved Type III Life Vest or Buoyant Work Vest USCG Approved Type V.	
12. Traffic High Visibility Safety Vest -	As required by North Carolina Occupational Health and Safety Standards and as required by th
NOTE: Traffic High Visibility Safety Vest purchased shall comply with ANSI/ISEA 107-2015.	"Manual on Uniform Traffic Control Devices" (MUTCD).