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# PURPOSE

This standard establishes the minimum requirements for the selection, use, storage, maintenance and training for personal protective equipment (PPE) at TI sites worldwide.

# SCOPE

The provisions of this standard apply to all TI employees, suppliers, vendors, and visitors at TI sites worldwide.

# reference documents

## TI ESHMS 4.5.4 “Records Management”

## TI ESH Standard 01.05 “Respiratory Protection Program”

## TI ESH Standard 04.01 “Electrical Safety”

## TI ESH Standard 04.01A “Electrical Safety for Design or Test Workspaces”

## TI ESH Standard 10.01 “Laser Safety Standard”

# Definitions

[TI ESH Standards Glossary of Definitions](https://sps01.itg.ti.com/sites/wwf/esh/standards/Knowledge_Bank/00.01.xlsx)

# Requirements

## General

### Wherever feasible, sites shall use engineering controls to reduce potential risks and eliminate the need for PPE.

### When required, PPE shall be made readily available to TI personnel at no cost to the employee. The cost of enhancements to PPE (such as upgraded style) will be the responsibility of the employee.

### PPE shall be used, maintained, inspected and stored according to the manufacturer’s instructions and TI site ESH requirements.

### PPE or clothing that has been contaminated shall not be removed from the site until proper decontamination has occurred.

### Provisions for Proper Selection, Use, Inspection, and Storage of PPE shall comply with local regulatory requirements and/or manufacture’s specification.

### All repair and maintenance on PPE shall be performed by qualified individuals per the manufacturer’s requirements.

### All PPE must be certified for its intended use and accepted, labeled or some other way recognized by a Nationally Recognized Testing Laboratory.

## PPE Assessments

Sites shall establish and implement a PPE assessment process. The PPE hazard assessment documentation shall include:

### The name of the area being evaluated;

### The date (s) and name (s) of the person(s) performing the assessment;

### A description of the any engineering controls utilized;

### An evaluation of the potential routes of exposure (e.g. inhalation, ingestion, injection, adsorption);

### An evaluation of the potential sources of injury or illness (e.g. mechanical, electrical, dust);

### Identification of the body parts affected,

### Specify type of PPE required (i.e., glove type, respiratory type), and;

### Limitations for use (e.g. change-out frequency, special instructions, etc.).

#### Note: Permeation and degradation data should be referenced and considered when available.

### Records of PPE assessments shall be retained in accordance with the ESH Record Retention Matrix.

## PPE Reassessment

### Sites shall reassess PPE usage at least every three years or as processes are changed to determine:

#### Feasibility of implementing engineering controls to eliminate or reduce the need for PPE, and;

#### Ensure current PPE is correct.

## Head Protection

### Bump caps shall not be used for protection against falling objects:

### Hard hats shall be worn when falling objects are a potential hazard;

### Hard hats/Bump caps shall have internal components (suspension) to assist in maintaining the hat/cap position on one’s head;

### Hard hats/Bump caps shall be made of non-conductive materials, and;

### Hard hats shall be worn in all construction areas and in areas of the building where floor openings exists above the work area.

## Eye Protection

### Safety glasses with side protection is required where there is a hazard from flying objects or particulate. The safety glasses must be impact resistant;

### Goggles shall be required where there is a hazard from liquid chemical spray and/or fine particulate exist;

### Face shields must be worn when there is a hazard from impact, heat, or splash. Face shields must be used in conjunction with safety glasses or goggles.

### Sites shall provide laser eyewear in all areas where required in accordance with TI ESH Standard 10.01 Laser Safety Standard

## Hand and Body Protection (including Arm Protection)

### Shall be provided in multiple sizes so that the fit will not create an additional hazard;

### Shall be specific to the hazard type (i.e. cut resistant, chemical resistant, heat resistant), and;

### Shall identify the limitation of use either through training or documentation.

## Foot Protection

### Appropriate protective footwear shall be worn when there is a risk of injury due to falling or rolling objects, sharp objects that can puncture soles, electrical hazards, chemical hazard or wet, slippery surfaces as determined by the PPE Assessment.

### Open-toe, and/or open-heel canvas top shoes, sandals, or other similar footwear shall be prohibited in areas where hazardous liquids or mechanical hazards exist, and;

### The site ESH professional may prohibit shoes with elevated heights, rigid soles, wedge or spike heels for certain tasks or work assignments that may increase the risks of slips, trips or falls.

## Hearing Protection

### Sites shall ensure that adequate hearing protection devices (ear plugs and/or ear muffs) are available in all areas where hearing protection is required in accordance TI ESH Standard 01.06 Hearing Conservation.

## Respiratory Protection

### Sites shall ensure that adequate respiratory protection devices (air purifying respirator (APR) or supplied air respirators (SAR)) are available in all areas where respiratory protection is required in accordance TI ESH Standard 01.05 Respiratory Protection Program.

## Emergency Response

### Emergency Response PPE (Level of protection and material type) shall be determined by the on-scene incident commander using the information gathered in the field, training, and resources provided by WW Protective Services.

## Electrical PPE

### Sites shall ensure that adequate electrical PPE is available in accordance with TI ESH Standard 04.01 Electrical Safety and 04.01A Electrical Safety for Design or Test Workspaces.

## PPE Disposal

### PPE shall be disposed of when it has been:

#### Damaged;

#### Compromised due to breakthrough, permeation, degradation, penetration, or;

#### Affected to the extent it does not perform according to manufacturer’s specifications.

### PPE shall be re-used only when it:

#### Is in good working condition;

#### Can effectively be decontaminated between uses;

#### Can effectively be sanitized between different users, and;

#### Can be stored in a way that maintains integrity and does not create cross contamination.

## Provision for Area Identification

### Sites shall use signs to indicate the type of PPE that is required.

## Training Requirements

### Initial training shall be provided before affected personnel are permitted to work in areas where the use of PPE is required. Refresher training shall be provided:

#### When PPE requirements change;

#### When affected personnel fail to demonstrate understanding of the above requirements, or;

#### At least every three years.

### Employees must demonstrate an understanding of the training material. Successful completion of training shall be documented. Training records should include the employee name, date of training, and the subject of training.

### General PPE Training Content

#### This training will include at a minimum each specific type of PPE that is identified in the PPE assessment(s). The training information will include the following aspects:

##### Proper selection, size and use of PPE;

##### Inspection of PPE prior to use;

##### Limitations of PPE;

##### Proper methods for putting on, taking off, adjusting and wearing PPE;

##### Special hazards involved or limitations when using PPE;

##### Proper maintenance, cleaning, storage, and disposal of PPE, and;

##### Proper reporting of injury or illness due to potential exposure

# STANDARD Approval

This standard has been approved by David Thomas, TI Vice President.

# Revision history

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rev#** | **Date** | **Nature of Revision** | **Author/Editor** | **Approver** |
| A | 10/18/2003 | Major periodic review | Gene Schaefers | Brenda Harrison |
| B | 12/29/2006 | Major periodic review; minor wording changes | Gene Schaefers | Brenda Harrison |
| C | 06/14/2012 | Updated TI ESH Standards 01.01 PPE to include hearing and respiratory protection. Rewrite document to act as a standalone program for PPE. Reformatted to new layout. | Rene’ Graves | David Thomas |
| D | 05/12/2014 | Removed references to obsolete standard 07.01 | Chris Lee | ELC |
| E | 11/30/2016 | Standardized assessment name to PPE Assessment; included re-assessment frequency; Included references to electrical PPE and laser eyewear; Included requirement regarding foot protection and Emergency Response PPE; minor wording changes. | Hayden Baker | ELC |
| F | 3/25/2019 | Added example of PPE limitation and permeation/degradation note. | Hayden Baker | ELC |