



Lusail Real Estate Development Company

Health, Safety, Security, Environment, Logistics & Quality Department

Lusail Construction Safety Management Procedure – Personal Protective Equipment (PPE)

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1. Description

This LCSMP element explains the requirements for the selection and use of personal protective equipment (PPE) to provide employees with eye, face, head, arm, hand, body, and foot protection. This element applies to all Lusail personnel, Contractors, Developers, Consultants and subcontractors working on the Lusail projects.

Respiratory protection, hearing protection, and fall protection are not covered in this element. Refer to [LUS-HSE-WG3-446-008](#) - Respiratory Protection Program; [LUS-HSE-WG3-446-007](#) - Hearing Conservation; and [LUS-HSE-WG3-446-022](#) - Fall Protection.

2. Definitions

Term	Description
Job Hazard Analysis (JHA)	A process used to identify hazards or potential hazards associated with each step of a job or work plan to uncover hazards and eliminate, control, or remove them before the work is started.
Contaminant	Any material that by reason of its action upon, within, or to a person, is likely to cause physical harm.
Radiant energy	Energy that travels outward in all directions from its source.
Optical density (OD)	The light-refractive characteristics of a lens.

3. Responsibility

The Contractor is fully responsible for the pre-planning, development of Method Statements, Job Hazard Analysis, overall safe work planning and implementation. The Contractor's Project Management is responsible for the assurance that all work is planned and conducted according to the pre-planning document, Contractor and Lusail Health Safety & Environment (HSE) procedures and the Qatar Construction Specifications 2010. Should a conflict occur between procedures/standards or requirements the more stringent will apply.

4. PPE Plan

The HSE Representative leads the development of, and assists the Project Manager in implementation of a site-specific PPE plan. The PPE plan is included in the project safety plan. The HSE Representative may refer to the Sample PPE Plan (Attachment [LUS-HSE-FM4-446-011](#)) which includes the PPE plan requirements described in the following subsections.

4.1 General Requirements

PPE should not be used as a substitute for engineering, work practice, or administrative controls. PPE should be used in conjunction with these controls to provide for employee safety and health in the workplace. PPE is provided for use and shall be maintained in a sanitary and reliable condition. The basic element of any management program for PPE should be an in-depth evaluation of the equipment needed to protect against the hazards encountered. The evaluation is required by reasons of hazards of processes or environment to protect body parts from inhalation, absorption or physical contact. It should also be used to set a Standard Operating Procedure (SOP) for training personnel on the limitations, proper use, and maintenance of the PPE.

The use of employee-owned equipment is not permitted as a general rule. If the use of employee-owned equipment is permitted with the approval of the HSE Department, Lusail shall be responsible for assurance of its adequacy, maintenance, and sanitation.

- ◆ As a minimum, the following PPE is required on all Lusail project sites:
 - ANSI/ EU-approved safety glasses with side shields
 - ANSI/ EU-approved hard hats (company logo recommended)
 - All-leather, above-the-ankle work shoes equipped with steel or safety toe
 - High-visibility vest (company logo recommended)

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- ◆ Exceptions to the minimum PPE for project sites must be approved by Lusail HSE.
 - ◆ Required PPE shall be furnished by Contractors at no cost to their employees.
 - ◆ PPE is not used for any purpose other than employee protection.

All PPE manufactured and imported from the European Union should have CE marking indicating its conformity with the QCS 2010 PPE directive.

4.2 Job Hazard Analysis (JHA)

JHAs identify the tasks for which PPE beyond the minimum required is necessary. If the JHA indicates that additional PPE is necessary, the HSE Representative selects the specific PPE. JHAs are conducted and/or updated for PPE under the following circumstances:

- ◆ When a job changes
- ◆ When new equipment or process is introduced
- ◆ When an accident has occurred
- ◆ When a supervisor or employee requests it

PPE should only be used as a control if hazards cannot be eliminated or controlled through engineering or administrative controls.

The workplace must be assessed to determine if hazards that require the use of head, eye, face, hand, or foot protection are present or likely to be present. The hazard assessment must be written and contain the following information.

- ◆ Identification of assessment documentation
- ◆ The person's name and signature certifying the form
- ◆ The date(s) of certification

If hazards are present or likely to be present, the PPE identified to be used must be selected for each affected employee.

4.3 PPE Selection

The HSE Representative selects the appropriate PPE for each potential hazard presented in JHAs. The Foreman and Project Manager assist in determining the appropriate PPE and ensure that it is provided to the employees.

The HSE Representative should be aware of the types of PPE available and the levels of protection offered. Selection tools for determining appropriate PPE for the task include:

- ◆ Chemical Resistance Glove Selection Chart (Attachment [LUS-HSE-FM4-446-012](#))
- ◆ Filter Lenses for Welding (Attachment [LUS-HSE-FM4-446-013](#))
- ◆ Eye and Face Protector Selection Chart (Attachment [LUS-HSE-FM4-446-014](#))
- ◆ Laser Safety Lenses (Attachment [LUS-HSE-FM4-446-015](#))
- ◆ Consultation with sales representative, manufacturer, or Lusail HSE Department

The selection of appropriate protection is based on an evaluation of the performance characteristics of the PPE relative to the task(s) to be performed, conditions present, duration of use, and hazards and potential hazards identified.

- ◆ Selected PPE must be fitted to each affected employee. Fitting includes the proper donning, doffing, cleaning, and maintenance.
- ◆ PPE should not interfere with the employee's work or create additional hazards (e.g., fogged lenses, trip hazards, and loose materials).
- ◆ All PPE must be of safe design and construction for the work to be performed.
- ◆ Where feasible, PPE should provide a level of protection greater than the minimum required to protect employees from hazards.

- ◆ If several different types of PPE are worn together, they must be compatible.
- ◆ Consider the fit and comfort of PPE when selecting appropriate items to encourage employee use of PPE. Multiple styles and sizes of PPE are available to accommodate employees. Select size-adjustable PPE (e.g., hard hats, lanyards) when available.
- ◆ Consider the chemical resistance properties of the PPE material.

4.4 PPE Provisions

The Contractor shall provide PPE to employees at no cost to the employee if the PPE is required by the JHA or is of the type that would not reasonably or normally be worn away from the workplace (e.g., single-use or disposable PPE).

Supervisors issue the appropriate PPE to employees before the start of work.

Defective or damaged PPE shall NOT be used.

4.5 PPE Maintenance and Use

The HSE Representative determines provisions for cleaning and storing PPE throughout the project. The Superintendent provides secure storage facilities and personnel to maintain PPE accordingly. All PPE must be used and maintained in a clean and reliable condition. Provisions for cleaning will include:

- ◆ Keep face and eye protection clean and in good condition. Cleaning is particularly important for eye and face protection: dirty or fogged lenses could impair vision.
- ◆ Disinfect goggles, gloves, respirators, and other protectors that have been previously used before they are issued to another employee.
- ◆ If PPE cannot be decontaminated, disposed of it in a manner that protects employees from exposure to hazards.
- ◆ If employees provide their own PPE, the foreman/supervisor must ensure that it is maintained in a clean and reliable condition.

The Project Manager must ensure that employees use PPE identified for their protection on the job:

- ◆ Employees inspect PPE before and after each use for defects and to ensure that defective PPE is not used.
- ◆ Return defective and damaged PPE to the tool room or discard it, as appropriate.

5. Types of PPE

5.1 Eye and Face Protection

All Contractor employees assigned to field projects or who perform field-related work activities will be provided with, and required to wear, basic eye protection (safety glasses with side shields) at all times while performing field tasks. The need for additional PPE will be addressed through JHAs.

- ◆ Employees must use basic eye protection that provides side protection to protect from flying objects or particles. Detachable side protection (e.g., clip-on or slide-on side shields) is acceptable. Personnel must wear approved safety glasses with side shields at all times while on any project, except as specifically excluded below:
 - Inside offices
 - Inside enclosed vehicles (e.g., cars, trucks, equipment)
 - When wearing goggles or a full-face respirator
- ◆ Employees who wear prescription lenses while engaged in operations that involve eye hazards must wear eye protection that incorporates the prescription in its design, or must wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses. For employees who wear prescription eyeglasses, the Contractor must provide safety glasses that fit over the employee's prescription glasses.
- ◆ Employees must wear goggles and/or a face shield when they are exposed to eye or face hazards from molten metal, liquid chemicals, acids or caustic liquids, or chemical gases or vapors.
- ◆ Employees must wear goggles and/or a face shield with safety glasses when cutting or grinding, or when using pressurized air and liquids.

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- ◆ Employees must wear welding goggles and/or a welding shield with safety glasses when they are exposed to potentially injurious light radiation during welding tasks. Employees will use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation in accordance with [LUS-HSE-WG3-446-028](#), Welding, Cutting, and Brazing.
 - ◆ Employees must use portable welding shields if other workers might have eye contact with arc welding.
 - ◆ Employees must wear laser safety goggles when they are exposed to laser beams. The goggles should be rated against the specific energy involved. Laser Safety Lenses (Attachment [LUS-HSE-FM4-446-015](#)) lists the maximum power or energy density protection available with glasses of optical densities (ODs) of 5 through 8. Laser safety goggles are labeled with the following information from the manufacturer:
 - Laser wavelengths for intended use
 - OD of the wavelengths
 - Visible light transmission
 - ◆ Employees who wear contact lenses must wear appropriate eye and face protection devices in a hazardous environment. Dusty and/or chemical environments may represent an additional hazard to contact lens wearers.
 - ◆ Protective eye and face devices must comply with ANSI/ISEA Z87.1-2010 or EU equivalent.

Employees are provided with additional eye and face protection equipment when machines or operations present potential eye and face injury from physical, chemical, or radiation agents. In areas so designated, eye and/or face protection is required.

As a minimum, eye and face protection must satisfy the following criteria.

- ◆ Provide adequate protection against the hazards for which they are designed
- ◆ Be reasonably comfortable when worn under the designated conditions
- ◆ Fit snugly without interfering with the movements or vision of the wearer
- ◆ Be durable
- ◆ Be easily cleanable
- ◆ Be kept clean and in good repair

Employees who wear corrective eyeglasses must be protected by goggles or safety glasses, when required, of one of the following types.

- ◆ Prescription safety glasses that include protective lenses
- ◆ Goggles capable of being worn over prescription safety glasses
- ◆ Goggles with prescription lenses mounted behind the protective lenses

Note: Safety spectacles require special frames. Combinations of normal street wear frames with safety lenses are not in compliance.

Figure 6-1 shows the available selection of face and eye protection for the hazards and operations noted.

5.1.1 Protection Against Radiant Energy

Employees performing electric arc welding must wear approved eye protection to avoid damage to eyesight and eye tissue. Prolonged exposure to electric arc welding causes eye irritation, even hours after exposure. The symptoms of eye irritation from exposure to radiant energy include a sensation of grittiness between the eye and the eyelid. Immediate medical attention is recommended. Portable welding shields are to be used when there is a potential for other workers to have eye contact with arc welding.

5.1.2 Welding Filters Shade Numbers

Table 6-1 describes the available selection of shade numbers of filter lenses or plates used in welding. Shades denser than those shown in the table may be used to suit individual needs.

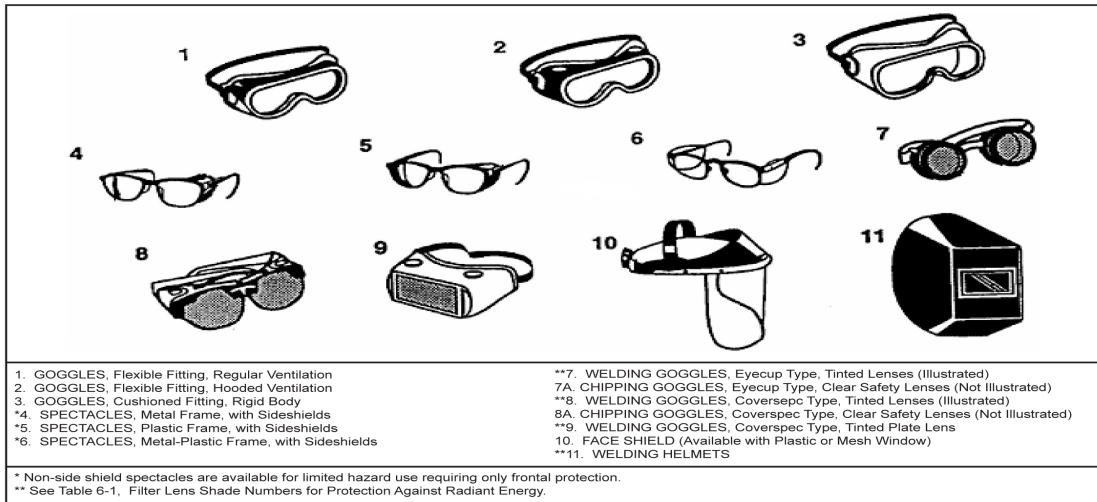


Figure 6-1 – Eye and Face Protector Selection Guide

Table 6-1 – Filter Lens Shade Numbers for Protection Against Radiant Energy

Shade Number	Welding Operation
10	Shielded metal arc welding 1/16, 3/32, 1/8, 5/32-in. diameter electrodes
11	Gas-shielded arc welding (nonferrous) 1/16, 3/32, 1/8, 5/32-in. diameter electrodes
12	Gas-shielded arc welding (ferrous) 1/16, 3/32, 1/8, 5/32-in. diameter electrodes
12	Shielded metal-arc welding 3/16, 7/32, 1/4-in. diameter electrodes
14	Shielded metal-arc welding 5/16, 3/8-in. diameter electrodes
10 to 14	Atomic hydrogen welding
14	Carbon arc welding
2	Soldering
3 or 4	Torch brazing
3 or 4	Light cutting, up to 1 in.
4 or 5	Medium cutting, 1 in. to 6 in.
5 or 6	Heavy cutting, over 6 in.
4 or 5	Gas welding (light), up to 1/8-in.
5 or 6	Gas welding (medium), 1/8u-in. to 1/2-in.
6 or 8	Gas welding (heavy), over 1/2-in.

5.1.3 Laser Protection

Employers of workers routinely exposed to laser beams provide laser safety goggles for protection against the specific energy involved. Table 6-2 lists the maximum power or energy density protection available with glasses of optical densities (OD) of 5 through 8.

Table 6-2 – Laser Safety Glass

Intensity	Attenuation	
	CW Maximum Power Density (watts/cm ²)	Optical Density
10-2	5	105
10-1	6	106
1.0	7	107
10.0	8	108

All laser safety goggles must be labeled with the following information from the manufacturer:

- ◆ Laser wavelengths for intended use
- ◆ Optical density (OD) of the wavelengths
- ◆ Visible light transmission

5.2 Head Protection

Hard hats may not be altered from manufacturer's original design. Drilling holes or cutting the shell of the hat is forbidden.

In accordance with QCS 2010, hard hats can be used a maximum of 3 years and this time may be reduced dependent on the use, environment, storage arrangements etc., for example helmets must not be stored in direct sunlight as the sun rays degrade the plastic (e.g. if stored on the rear shelf of a car). Safety Helmets should be subject to regular inspection by the user, to determine their suitability for use up to the 3 year maximum.

Hard hats damaged in any way must be replaced.

All components, shells, suspensions, headbands, sweatbands, and any accessories should be visually inspected daily for signs of dents, cracks, penetration, or other damage that might reduce the degree of safety originally provided.

All Lusail and Contractor employees assigned to field projects or who perform field-related work activities are provided with, and are required to wear, Class B head protection at all times while performing field tasks. The need for additional PPE is addressed through JHAs.

- ◆ Employees must wear protective helmets (hard hats) to protect the head from potential injury. Skull caps/metal hard hats are not permitted. Bump caps are not permitted. All personnel must wear appropriate hard hats at all times while on any project, except as specifically excluded below:
 - Inside offices
 - Inside enclosed vehicles (e.g., cars, trucks, fully enclosed equipment)
- ◆ Hard hats are grouped into three classes (A, B, and C) and two types (1 and 2) according to how they meet various criteria for protection from impact, penetration, electrical conductivity, flammability and other safety hazards:
 - Class A hard hats protect the head from the force of impact of falling objects and from electrical shock during contact with exposed low-voltage conductors.
 - Class B hard hats protect the head from the force of impact of falling objects and from electrical shock during contact with exposed high-voltage conductors.
 - Class C hard hats protect the head from the force of impact of falling objects.
 - Type 1 hard hats have a full brim.
 - Type 2 hard hats have no brim but may include a peak.
- ◆ In radiation areas, the use of hard hats must be sufficient to adequately protect personnel. A limited number of hard hats are kept in a radiation work area for general use.
- ◆ Supplementary hard hat equipment includes winter liners, sweat bands, chinstraps, and cloth caps.
- ◆ When using a face shield, welding hood, or sandblasting hood, use the type that combines with a hard hat.

- ◆ Protect hair against being caught in moving machinery, subjected to sparks, or snagged on objects. Protect long hair by compacting it into the hard hat shell or by use of a hair net or ties so that it is not loose.
- ◆ Do not modify hard hats. Painted hard hats are not allowed and alterations to the hat or suspension system are not permitted.
- ◆ Adjust hard hats to fit properly and wear them correctly. The hat may not be cocked at an angle or perched on the back of the head. If worn correctly, the hard hat protects in the following ways:
 - The hard hat shell is the basic impact protection against falling and flying objects and bumping into objects.
 - The curved shell allows an object to ricochet or slide off, reducing the force of impact.
 - The space maintained between the shell and the head (minimum of 1¼ inches) above the suspension, minimizes the shock, and prevents the shell from striking the head solidly upon impact.
 - The space between the suspension and the shell (sufficient for ventilation) on the side of the hat softens the effect of lateral blows.
 - The peak and brim protect the face and the outwardly curved bottom edge affords protection to the ears and the nape of the neck.
- ◆ Hard hats must comply with ANSI/ISEA Z89.1-2009; or EU equivalent.

5.3 Foot Protection

As a minimum, all Lusail and Contractor employees assigned to field projects or who perform field-related work activities must wear sturdy leather work boots/ shoes equipped with steel or safety toe at all times while performing field tasks. The need for more stringent footwear and/or additional PPE is addressed through JHAs.

- ◆ Footwear is selected according to the work performed, and the hazards present.
- ◆ Rubber safety boots are provided on jobs where chemical hazards exist.
- ◆ Metatarsal guards must be worn when using jack hammers, tampers, and similar equipment that creates a severe impact type hazard.
- ◆ Footwear in need of repair is prohibited. Rips in material, broken heels, split seams, and holes in the footwear are examples of a need to repair or replace.
- ◆ Sneakers, canvas shoes, sandals, tennis shoes, loafers, walking shoes, athletic or other soft leather-type shoes are not acceptable footwear for field activities. Appropriate footwear must be worn at all times by all personnel while on any project, except as specifically excluded below:
 - Inside offices
- ◆ Employees must wear additional protective footwear (safety boots) when working in areas where there is a danger of foot injuries from falling or rolling objects, or objects piercing the sole. There are five main types of protective footwear, each focusing on a specific type of foot hazard:

Hazard	Footwear Type
Electrical	Conductive, Electrical Hazard, Static Dissipative
Falling Objects	Metatarsal
Punctures	Sole puncture-resistant

- ◆ Protective footwear must comply with ASTM F2412-11 and ASTM F2413-11 or EU equivalent.

5.4 Arm and Hand Protection

The need for arm and hand protection is addressed through JHAs. No one glove provides protection against all potential hand hazards, and commonly available glove materials provide only limited protection against many chemicals. Appropriate gloves are required where employees may be exposed to:

- ◆ Chemical skin absorption
- ◆ Cuts, abrasions, or lacerations
- ◆ Punctures
- ◆ Chemical or thermal burns
- ◆ Frostbite

Leather gloves are recommended for protection from sparks, moderate heat, blows, chips, and rough objects. Leather gloves and sleeves are recommended when employees conduct cutting, welding, or grinding.

Aluminized, aramid fiber, or synthetic gloves are recommended for protection from thermal burns.

Chemical protective gloves for handling hazardous materials should be composed of the appropriate chemical-resistant materials in accordance with the Chemical Resistance Glove Selection Chart (Attachment [LUS-HSE-FM4-446-012](#)).

No single glove type will protect an employee from every hazard. For this reason, gloves must be selected that are correct for the particular job. All field personal should have useful gloves in their possession and are instructed to use their gloves when there is a chance their hands could be injured. Consideration must also be given to the proximity of the hand to rotating equipment. Gloves should not be worn when there is a chance that they could become entangled.

Cut-resistant gloves are required when handling glassware (i.e. placing caps on VOA glass vials). Cut-resistant gloves shall be worn under other gloves (i.e. nitrile) when additional protection is needed (i.e. chemical resistant). Gloves of 100% [Dyneema® Yarn](#) provides excellent cut resistance.

5.4.1 Arm and Hand Protection

Glove selection depends on the type of chemical encountered.

A Material Safety Data Sheet (MSDS) must be consulted for the chemical in question. The specific type of glove that should be used is described in the protective equipment section.

Consideration should be made to the likelihood of encountering abrasive material in the course of the exposure. Steps must be taken to protect the glove from punctures in these cases.

Reusable gloves must be either thoroughly cleaned before being stored, or they must be properly disposed of. Contaminated gloves may not be stored with clean materials.

Disposable type gloves must be disposed of immediately upon removal. These gloves may not be reused.

5.4.2 Abrasive Materials Exposure

Glove selection depends on the types of materials handled. Leather or cotton gloves are useful in most situations.

When working with wire, nails, steel handling and erection, rebar work, lumber handling, and other processes where the hand comes into contact abrasive objects, gloves must be worn.

When performing work with sheet metal or materials that may have sharp and jagged edges, consideration must be given to the use of metal mesh or kevlar gloves.

5.4.3 Electrical Exposure

In all situations, the lock out/tag out procedures outlined in [LUS-HSE-WG3-446-023](#), must be followed if at all possible as a precaution against electrocution. Work on energized electrical equipment is done as a last resort only.

When lineman type gloves must be used in conjunction with work on live electrical sources, the gloves must be inspected according to manufacturer recommendations. Rubber protective equipment for electrical work must conform to the requirements established in ANSI.

All protective equipment used when working on live electrical sources must be tested before use. An electrically nonconductive hard hat must be used.

Any work performed on live electrical sources must be done in conjunction with OSHA standard 1926.400 and 1910.137.

5.4.4 Heat Exposure

Glove selection for this hazard should follow manufacturer's specifications for heat resistance based on the extremes of temperatures encountered in the job process.

Any glove that becomes damaged during use must be immediately replaced

5.5 Protective Clothing

Many hazards can threaten the torso included, but not limited to, the following: heat, splashes from hot metals and liquids; impacts; cuts; acids; and/or radiation. A variety of protective clothing is available including the following: vests, jackets, aprons, coveralls, and full body suits. Protective clothing selection and use must follow protective garment manufacturer's recommendations.

The need for protective clothing is addressed through JHAs. Appropriate gloves are required where employees may be exposed to the following:

- ◆ Chemical skin absorption
- ◆ Temperature extremes
- ◆ Hot splashes from molten metals and other hot liquids
- ◆ Potential impacts from tools, machinery, and materials
- ◆ Hazardous chemicals
- ◆ Cuts
- ◆ Radiation

Protective clothing should be specific to the task and may include cotton coveralls, Tyvek coveralls, leather pants, or appropriate chemical protective suits.

5.6 Drowning Protection

Contractor shall select appropriate personal flotation devices (PFDs) and require employees to wear them when work is conducted in areas where the danger of drowning exists (e.g., on, over, or alongside the water). Employees are not required to wear PFDs when:

- ◆ Water is known to be less than waist high (1 meter).
- ◆ Employees are working behind compliant standard guardrails.
- ◆ Employees are inside operating cabs or stations that eliminate the possibility of accidentally falling into the water.
- ◆ Employees are wearing an approved safety belt with a lifeline attached that prevents the possibility of accidentally falling into the water.
- ◆ PFD types must be approved by the Qatari Government or their designee. Ski belts or inflatable type PFDs are prohibited.

Note: A rescue device, such as a ring buoy, with thirty (30) meters of line must be kept in close proximity to the actual work site in order to be accessed in case of an emergency. Distance between ring buoys may not exceed 60 meters.

6. Training

Contractors shall train each employee who must use PPE as required by this element.

Employees must be trained to know when PPE is necessary, what type is necessary, how it is to be worn, and what its limitations are. Selected PPE must be fitted to each affected employee. Additionally, employees must know the proper care, donning, doffing, cleaning, maintenance, inspection procedures, useful life, and disposal of PPE. Defective or damaged PPE shall NOT be used. The Contractor is required to certify in writing that training has been carried out and that employees understand it. Each written certification must contain the following:

- ◆ The name of each employee trained

- ◆ The date(s) of training
- ◆ Identity of the subject of the certification

The HSE Representative arranges employee training at the time of initial assignment. Supervisors are responsible for identifying additional employee training needs during risk mitigation planning (two-week look ahead). Training can be organized and presented to groups or on a work area by work area basis, depending on the operation. As a minimum, each employee is trained on the following topics:

- ◆ When PPE is necessary
- ◆ What PPE is necessary
- ◆ How to properly don, doff, adjust, and wear PPE
- ◆ Limitations of the PPE
- ◆ Proper care, maintenance, useful life, and disposal of the PPE

Each affected employee must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE.

When there is reason to believe that an affected employee who has already been trained does not have the understanding and skill required, the employee is retrained. Retraining is required under the following circumstances:

- ◆ Changes in the workplace that render previous training obsolete
- ◆ Changes in the type of PPE to be used that render previous training obsolete
- ◆ Inadequacies in an affected employee's knowledge or use of assigned PPE

Using an acceptable training form, the records custodian maintains a record of all training or instruction given to employees.

7. Documentation

The trainer documents that each employee using PPE has received and understood the required training. Documentation must include:

- ◆ Name of each employee
- ◆ Date(s) of training
- ◆ Subject of the training
- ◆ Employee PPE training records will be retained

The records custodian documents all instruction and training. The HSE Representative maintains safety training records at the site for the duration of the project and archives them for a minimum retention time of 10 years from creation date.

8. References

Qatar Construction Specifications 2010 Section 1 Part 10.7 "Welfare of Workmen"

Qatar Construction Specifications 2010 Section 11 Part 2.3.9 "Personal Protective Equipment (PPE)"

Qatar Construction Specifications 2010 Section 11 Part 1.2 "Occupational Health and Hygiene"

ASTM F2412-11 and ASTM F2413-11 Personal Protection – Protective Footwear

ANSI/ISEA Z87.1-2010, Practice for Occupational/Educational Eye and Face Protection

ANSI/ISEA Z89.1-2009, Personnel Protection – Protective Headwear for Industrial Workers

AWS F2.2-01, Lens Shade Selector

AWS/ANSI Z49.1-12, Safety in Welding, Cutting, and Allied Processes

9. Attachments

- [LUS-HSE-FM4-446-011](#) Sample PPE Plan
- [LUS-HSE-FM4-446-012](#) Chemical Resistance Selection Chart for Protective Gloves
- [LUS-HSE-FM4-446-013](#) Filter Lenses for Welding
- [LUS-HSE-FM4-446-014](#) Eye and Face Protection Selection Chart
- [LUS-HSE-FM4-446-015](#) Laser Safety Lenses