

CITY OF JACKSON

PERSONAL PROTECTIVE EQUIPMENT (PPE) POLICY



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1. INTRODUCTION

Employers are responsible for providing a safe and healthy workplace for their employees. OSHA's role is to promote the safety and health by setting and enforcing standards; providing training, outreach and education; establish partnerships; and encouraging continual improvement in workplace safety and health.

2. Requirements for Personal Protective Equipment (PPE)

To ensure the greatest possible protection for employees in the workplace, the cooperative efforts of both employers and employees will help in establishing and maintaining a safe and healthful work environment.

Employers are responsible for:

1. Performing a "Hazard Assessment" of the workplace to identify and control physical and health hazards. (See attachment form # 1)
2. Identifying and providing appropriate PPE for employees.
3. Training employees in the use and care of the PPE.
4. Maintaining PPE, including replacing worn or damaged PPE.
5. Periodically reviewing, updating and evaluating the effectiveness of the PPE Program.

Employees should:

1. Properly wear PPE.
2. Attend training sessions on PPE.
3. Care for, clean and maintain PPE.
4. Inform his/her supervisor of the need to repair or replace PPE.

3. The Hazard Assessment

It is critical to identify physical and health hazards in the workplace. The "hazard assessment" should identify hazards that may be physical or health-related and a comprehensive hazard assessment should identify hazards in both categories.

Physical hazard examples include moving objects, fluctuating temperatures, high intensity lighting, rolling or pinching objects, electrical connections and sharp edges.

Health hazard examples include overexposure to harmful dusts, chemicals or radiation.

The hazard assessment begins with a walkthrough of the facility to develop a list of potential hazards in the following basic hazard categories:

- Impact
- Penetration
- Compression (roll-over)
- Chemical
- Heat/Cold
- Harmful dust
- Light (optical) radiation
- Biological

During a walkthrough survey during a hazard assessment, look for:

- Sources of electricity.
- Sources of motion such as machines or processes where movement may exist that could result in an impact between personnel and equipment.
- Sources of high temperatures that could result in burns, eye injuries or fire.
- Types of chemicals used in the workplace.
- Sources of harmful dusts.
- Sources of light radiation, such as welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.
- The potential for falling or dropping objects.
- Sharp objects that could poke, cut, stab or puncture.
- Biologic hazards such as blood or other potentially infected material.

Documentation of the "hazard assessment" is required through written certification that includes the following:

- Identification of the workplace evaluated;
- Name of the person conducting the assessment;
- Date of assessment; and
- Identification of the document certifying completion of the hazard assessment.

4. Training Employees in Proper Use of PPE

Employers are required to train each employee who must use PPE. Employees must be trained to know at the least the following:

- When PPE is necessary.
- What PPE is necessary.
- How to properly put on, take off, adjust and wear PPE.
- The limitations of the PPE.
- Proper care, maintenance, useful life and disposal of PPE.
- Additional required PPE training include in the following circumstances: If the employer believes that a previously trained employee is not demonstrating the proper understanding and skill level in the use of PPE; changes in the workplace; or changes in the type of required PPE that make prior training obsolete.
- The supervisor must document the training of each employee required to wear or use PPE that includes: certification for each employee; name of each employee trained; date of training; and a clear identification of the subject of the certification. The department should keep all training records and copies should be sent to the Safety Officer in Risk Management.

5. Selection of PPE

Employers should inform employees who provide their own PPE of the employer's selection decisions and ensure that any employee-owned PPE used in the workplace conforms to the employer's criteria based on the hazard assessment, OSHA requirements and the American National Standards Institute (ANSI).

6. Eye Protection for Exposed Employees

- a. Employers should decide whether there is a need for eye protection and face PPE through a "hazard assessment."
- b. Potential examples of eye or face injuries include:
 - Dust, dirt, metal or wood chips entering the eye from activities such as chipping, grinding, sawing, hammering, the use of power tools or even strong wind forces.
 - Chemical splashes from corrosive substances, hot liquids, solvents or other hazardous solutions.
 - Objects swinging into the eye or face, such as tree limbs, chains, tools or ropes.
 - Radiant energy from welding, harmful rays from use of lasers or other radiant light (as well as heat, glare, sparks, splash & flying particles).
- c. Consider the following when selecting suitable eye and face protection:
 - The ability to protect against specific workplace hazards.
 - It should fit properly and be reasonably comfortable to wear.
 - It should provide unrestricted vision and movement.
 - It should be durable and cleanable.
 - It should allow unrestricted functioning of any other required PPE.
- d. Prescription lenses
 - Everyday use of prescription corrective lenses will not provide adequate protection against most occupational eye & face hazards, so employers must make sure that employees with corrective lenses either wear eye protection that incorporates the prescription into the design or wear additional eye protection over their prescription lenses.
 - It is important to ensure that the protective eyewear does not disturb the proper positioning of the prescription lenses so that the employee's vision will not be inhibited or limited.
 - Employees who wear contact lenses **MUST** wear eye or face PPE when working in hazardous conditions.
- e. OSHA requires PPE to meet the following ANSI standards: Eye and face Protection: ANSI Z87.1-1989 (USA Standard for Occupational and Educational Eye and Face Protection).

7. Head Protection

- a. Employers should decide whether there is a need for head protection PPE through a "hazard assessment."
- b. Employers must ensure that their employees wear head protection at all times, if any of the following apply:
 - Objects might fall from above and strike them on the head;
 - They might bump their heads against fixed objects, such as exposed pipes or beams;
or
 - There is a possibility of accidental head contact with electrical hazards.
- c. Protective helmets or hard hats should do the following:
 - Resist penetration by objects.
 - Absorb the shock of a blow.
 - Be water-resistant and slow burning.

- Have clear instructions explaining proper adjustment and replacement of suspension and headband.
 - It should allow unrestricted functioning of any other required PPE.
 - Hard hats must have a hard outer shell and a shock-absorbing lining that incorporates a headband and straps that suspend the shell from 1 to 1 ¼ inches (2.54 cm to 3.18 cm) away from the head.
 - Head protection must fit appropriately on the body and for the head size of each individual.
- d. Hard hats are divided into three industrial classes:
1. **Class A hard hats** provide impact and penetration resistance along with limited voltage protection (up to 2,200 volts).
 2. **Class B hard hats** provide the highest level of protection against electrical hazards, with high-voltage shock and burn protection (up to 20,000 volts). They also provide protection from impact and penetration hazards by flying/falling objects.
 3. **Class C hard hats** provide lightweight comfort and impact protection, but offer no protection from electrical hazards.
 4. A **“Bump hat,”** is another class of protective headgear designed for use in areas with low clearance. They are recommended for areas where protection is needed from head bumps and lacerations. These are NOT designed to protect against falling or flying objects and are NOT ANSI approved.
- e. Always replace a hard hat with any of the following defects:
- Perforation, cracking, or deformity of the brim or shell;
 - Indication of exposure of the brim or shell to heat, chemicals or ultraviolet light and other radiation (in addition to loss of surface gloss, such signs include chalking or flaking).
 - If it sustains an impact, even if the damage is not noticeable.
- f. OSHA requires PPE to meet the following ANSI standards: Head Protection: ANSI Z89.1-1986.

8. **Foot Protection**

- a. Employers should decide whether there is a need for foot protection PPE through a “hazard assessment.”
- b. Employees who face possible foot or leg injuries from falling or rolling objects or from crushing or penetrating materials should wear protective footwear.
- c. Employees whose work involves exposure to hot substances or corrosive or poisonous materials must have protective gear to cover exposed body parts, including legs and feet.
- d. Examples of situations in which an employee should wear foot and/or leg protection include:
 - When heavy objects such as barrels or tools might roll onto or fall on the employee’s feet;
 - Working with sharp objects such as nails or spikes that could pierce the soles or uppers of ordinary shoes;
 - Exposure to molten metal that might splash on feet or legs;
 - Working on or around hot, wet or slippery surfaces; and

- Working when electrical hazards are present.
- e. Foot & leg protection includes the following:
- **Leggings** protect the lower legs and feet from heat hazards such as molten metal or welding sparks. Safety snaps allow leggings to be removed quickly.
 - **Metatarsal guards** protect the instep area from impact and compression. Made of aluminum, steel, fiber or plastic, these guards may be strapped to the outside of shoes.
 - **Toe Guards** fit over the toes of regular shoes to protect the toes from impact and compression hazards. They may be made of steel, aluminum or plastic.
 - **Combination foot and shin guards** protect the lower legs and feet, and may be used in combination with toe guards when greater protection is needed.
 - **Safety shoes** have impact-resistant toes and heat-resistant soles that protect the feet against hot work surfaces common in roofing, paving and hot metal industries. The metal insoles of some safety shoes protect against puncture wounds. Safety shoes may also be designed to be electrically conductive to prevent the buildup of static electricity in areas with the potential for explosive atmospheres or nonconductive to protect employees from workplace electrical hazards.
 - **Special Purpose shoes:** Electrically conductive shoes provide protection against the buildup of static electricity. Electrical hazard, safety-toe shoes are nonconductive and will prevent wearer's feet from completing an electrical circuit to the ground.
- f. Footwear should be checked for wear and tear at reasonable intervals and for any of the following defects:
- Cracks or holes;
 - Separation of materials;
 - Broken buckles or laces;
 - Soles should be inspected for pieces of metal or other embedded items that could present electrical or tripping hazards.
 - OSHA requires PPE to meet the following ANSI standards: Foot Protection: ANSI Z41.1-1991.

9. Hand and Arm Protection

- a. For Hand Protection, there is no ANSI standard for gloves, but OSHA recommends that selection be based upon the tasks to be performed and the performance and construction characteristics of the glove material. For protection against chemicals, glove selection must be based on the chemicals encountered, the chemical resistance and the physical properties of the glove material. Insulating rubber gloves (See 29 CFR 1910.137 and the following section on electrical protective equipment for detailed requirements on the selection, use and care of insulating rubber gloves).
- b. There are many types of gloves available today to protect against a wide variety of hazards. The nature of the hazard and the operation involved will affect the selection of gloves.
- c. The following are examples of some factors that may influence the selection of protective gloves for a workplace.
- Types of chemicals handled.
 - Nature of contact (total immersion, splash, etc.).

- Duration of contact.
 - Area requiring protection (hand only, forearm and arm).
 - Grip requirements (dry, wet, oily).
 - Thermal protection.
 - Size and comfort.
 - Abrasion/resistance requirements.
- d. Gloves made from a wide variety of materials are designed for many types of workplace hazards fall into four (4) groups:
- **Gloves made of leather, canvas or metal mesh:**
 - a. Provide protection against cuts and burns.
 - b. Leather & canvas gloves protect against sustained moderate heat.
 - c. Metal mesh provide reflective and insulating protection against heat and require an insert made of synthetic materials to protects against heat and cold.
 - **Fabric and coated fabric gloves;**
 - a. Fabric gloves protect against dirt, slivers, chafing and abrasions. They do not provide sufficient protection for use with rough, sharp or heavy materials. Adding a plastic coating will strengthen some fabric gloves.
 - b. Coated fabric gloves are made from cotton flannel with napping on one side. By coating the un-napped side with plastic, fabric gloves are transformed into general-purpose hand protection offering slip-resistant qualities. These gloves are used for tasks ranging from handling bricks and wire to chemical laboratory containers.
 - c. When selecting gloves to protect against chemical exposure hazards, always check with the manufacturer or review the manufacturer's product literature to determine the glove's effectiveness against specific workplace chemicals and conditions.
 - **Chemical-and liquid-resistant gloves;**
 - a. **Chemical-resistant gloves** are made of different kinds of rubber: Natural, Butyl, Neoprene, Nitrile and Fluorocarbon (viton); or various kinds of plastic: Polyvinyl chloride (PVC), Polyvinyl alcohol and polyethylene.
 - b. **Natural (latex) rubber gloves** are comfortable to wear as a general-purpose glove. They feature outstanding tensile strength, elasticity and temperature resistance. In addition to resisting abrasions caused by grinding and polishing, these gloves protect employees' hands from most water solutions of acids, alkalis, salts and ketones. Latex gloves may cause allergic reactions in some individuals and may not be appropriate for all employees. Hypoallergenic gloves, glove liners and powderless gloves are possible alternatives for employees who are allergic to latex gloves.
 - c. **Neoprene gloves** are made of synthetic rubber and offer good pliability, finger dexterity, high density and tear resistance. They protect against hydraulic fluids, gasoline, alcohols, organic acids and alkalis. They generally have a chemical and water resistance properties superior to those made of natural rubber.

- d. **Nitrile gloves** are made of a copolymer and provide protection from chlorinated solvents such as trichloroethylene and per-chloroethylene. Although intended for jobs requiring dexterity and sensitivity, nitrile gloves stand up to heavy use even after prolonged exposure to substances that cause other gloves to deteriorate. They offer protection when working with oils, greases, acids, caustics and alcohols, but generally not recommended for use with strong oxidizing agents, aromatic solvents, ketones and acetates.
- e. Any gloves with impaired protective ability should be discarded and replaced. Reuse of chemical-resistant gloves should be evaluated carefully, taking into consideration the absorptive qualities of the gloves. A decision to reuse chemically-exposed gloves should take into consideration the toxicity of the chemicals involved and factors such as duration of exposure, storage and temperature.

10. **Body Protection**

- a. If a “hazard assessment” indicates a need for full body protection against toxic substances or harmful physical agents, the clothing should be carefully inspected before each use, it must fit each employee properly and it must function properly and for the purpose for which it is intended.
- b. Employees who face possible bodily injury of any kind that cannot be eliminated through engineering, work practice or administrative controls, must wear appropriate body protection while performing their jobs. In addition to cuts and radiation, the following are examples of workplace hazards that could cause bodily harm:
 - Temperature extremes;
 - Hot splashes from molten metals or other hot liquids;
 - Potential impacts from tools, machinery and materials; and
 - Hazardous chemicals.
- c. Protective clothing comes in variety of materials, each effective against particular hazards, such as:
 - **Paper-like fiber** used for disposable suits provide protection against dust and splashes.
 - **Treated wool and cotton** adapts well to changing temperatures is comfortable, and fire-resistant and protects against dust, abrasions, and rough and irritating surfaces.
 - **Duck** is a closely woven cotton fabric that protects against cuts and bruises when handling heavy, sharp or rough materials.
 - **Leather** is often used to protect against dry heat and flames.
 - **Rubber, rubberized fabrics, neoprene and plastics** protect against certain chemicals and physical hazards. When chemical or physical hazards are present, check with the clothing manufacturer to ensure that the material selected will provide protection against the specific hazard.

11. **Hearing Protection**

- a. If a “hazard assessment” indicates a need for hearing protection for employees can be challenging.

- b. Exposures to excessive noise depends upon a number of factors, including:
 - The loudness of the noise as measured in decibels (dB).
 - The duration of each employee's exposure to the noise.
 - Whether the employees move between work areas with different noise levels.
 - Whether noise is generated from one or multiple sources.
- d. Some types of hearing protection include:
 - **Single-use earplugs** are made of waxed cotton, foam, silicone rubber or fiberglass wool. They are self-forming and, when properly inserted, they work as well as molded earplugs.
 - **Pre-formed or molded earplugs** must be individually fitted by a professional and can be disposable or reusable. Reusable plugs should be cleaned after each use.
 - **Earmuffs** require a perfect seal around the ear. Glasses, facial hair, long hair or facial movements, such as chewing may reduce the protective value of the earmuffs.
- c. Generally, the louder the noise, the shorter the exposure time before hearing protection is required.
 - For instance, employees may be exposed to a noise level of 90dB for 8 hours per day (unless they experience a Standard Threshold Shift) before hearing protection is required.
 - On the other hand, if the noise level reaches 115 dB hearing protection is required if the anticipated exposure exceeds 15 minutes. (See attachment form # 2)
 - For a more detailed discussion of the requirements for a comprehensive hearing conservation program, see OSHA Publication 3074 (2002), "Hearing Conservation" or refer to the OSHA Standard at 29 CFR 1910.95, Occupational Noise Exposure, section (c).

The information, methods and procedures in this policy are based on the OSHA requirements for PPE as set forth in the Code of Federal Regulations (CFR) at:

29 CFR 1910.132 (General requirements);
29 CFR 1910.133 (Eye & Face Protection);
29 CFR 1910.135 (Head Protection);
29 CFR 1910.136 (Foot Protection);
29 CFR 1910.137 (Electrical Protective Equipment);
29 CFR 1910.138 (Hand Protection);
And regulations that cover the construction industry, at 29 CFR 1926.95 (Criteria for Personal Protective Equipment);
29 CFR 1926.96 (Occupational Foot Protection);
29 CFR 1926.100 (Head Protection);
29 CFR 1926.101 (Hearing Protection);
29 CFR 1926.102 (Eye & Face Protection).

Attachments:

Form # 1 – Hazard Assessment Form

Form # 2 – Table 5 Permissible Noise Exposures

Attachment Form # 1: Hazard Assessment PPE form

Personal Protective Equipment (PPE) Hazard Assessment Form

Department: _____ Job Classification _____

Assessor: _____ Date: _____

1. The workplace must be assessed for hazards which could potentially cause injury to employees while performing normal job tasks.
2. If such hazards exist, the assessment must determine if personal protective equipment (PPE) must be worn to protect the worker from such hazards.
3. If personal protective equipment is required the assessment should determine what type of personal protective equipment is best suited to protect the worker.
4. The department should keep the PPE Hazard Assessment form in a file and a copy should be sent to the Safety Officer in Risk Management.

HEAD HAZARDS: Tasks that can cause head hazards included: working below other workers who are using tools and materials which could fall, working under machinery or processes which might cause materials or objects to fall.

PPE Required: Yes or No

Describe head hazard(s): _____

If Yes, what type: _____

If No, why not: _____

EYE HAZARDS: Tasks that can cause eye hazards include: working with chemicals, working around flying objects such as when grinding, sanding, or woodworking, or when there is the potential for flying objects such as when lawn mowing.

PPE Required: Yes or No

Describe eye hazard(s): _____

If Yes, what type: _____

If No, why not: _____

EAR HAZARDS: Tasks that can cause ear hazards include: working around noisy equipment for extended periods of time.

PPE Required: Yes or No

Describe ear hazard(s): _____

If Yes, what type: _____

If No, why not: _____

HAND HAZARDS: Tasks that can cause hand hazards include: cutting or working with hot materials.

PPE Required: Yes or No

Describe hand hazard(s): _____

If Yes, what type: _____

If No, why not: _____

FOOT HAZARDS: Tasks that can cause foot hazards include: carrying or handling materials 15 pounds or more, and working in hot, cold, or wet environments.

PPE Required: Yes or No

Describe foot hazard(s): _____

If Yes, what type: _____

If No, why not: _____

FALL HAZARDS: Tasks which can expose an employee to falling hazards include climbing ladders, building maintenance, or working on bucket trucks that require harnesses.

PPE Required: Yes or No

Describe fall hazard(s): _____

If Yes, what type: _____

If No, why not: _____

LUNG/RESPIRATORY HAZARDS Tasks that can cause lung hazards include: working in areas without adequate oxygen or with atmospheres of chemicals or particulates in the air. i.e. respirators for use of paints.

PPE Required: Yes or No

Describe lung/respiratory hazard(s): _____

If Yes, what type: _____

If No, why not: _____

SKIN HAZARDS Tasks that can cause skin hazards include: working around chemicals or in contact with substances such as powder, flour, or water which might cause an allergic reaction.

PPE Required: Yes or No

Describe skin hazard(s): _____

If Yes, what type: _____

If No, why not: _____

List any personal protective equipment that you currently do not have, but should consider. List the purpose, should it be required, type of work involved, and the description of the PPE.

Name of PPE	Purpose	Required	Description of PPE
		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
		<input type="checkbox"/> Yes or <input type="checkbox"/> No	

Supervisor/Department Head Signature

Date

Supervisor/Department Head (please print name)

Form # 2 - Permissible Noise Exposure Table 5

Table 5 below, shows the permissible noise exposures that require hearing protection for employees exposed to occupational noise at specific decibel levels for specific time periods. Noises are considered continuous if the interval between occurrences of the maximum noise level is one second or less. Noises not meeting this definition are considered impact or impulse noises (loud momentary explosions of sound) and exposures to this type of noise must not exceed 140 dB. Examples of situations or tools that may result in impact or impulse noises are powder-actuated nail guns, a punch press or drop hammers.

Table 5
Permissible Noise Exposures

Duration per day, in hours	Sound level in dB*
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

* When measured on the A scale of a standard sound level meter at slow response. *Source: 29 CFR 1910.95, Table G-16.*