

 CITY OF TUCSON	City of Tucson Central Safety Services Number: S-001 Subject:	Page 1 of 9
		Effective Date: October 1, 1997
	Personal Protective Equipment	Reviewed/ Revised: 1 January 2013

1.0 PURPOSE

This procedure has been established to provide employees with a uniform directive for the identification and use of Personal Protective Equipment (PPE). It will also provide direction for evaluating work areas for the purpose of identifying hazards that may cause injuries to workers. It is written in compliance with the Occupational Safety and Health Act Part 29CFR 1910.132, 133, 135, 136 and 138.

2.0 SCOPE

This procedure will apply to all employees within the City of Tucson who are required by Job Hazard Assessment to utilize and wear PPE in order to perform their duties. It describes the functions that Directors, Managers, Supervisors and employees must perform in compliance with this directive.

The policies and procedures contained in this section are intended to assist in identifying and complying with OSHA Safety Standards. In all cases where there is a difference between specific OSHA standards and the Personal Protective Equipment policies set forth in this chapter, the stricter of the two shall apply.

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

A. Department/Division Managers

The user Department or Division will perform the required workplace hazard assessment utilizing the Job Hazard Analysis-Personal Protective Equipment Assessment checklist (Appendix A) identifying the workplace evaluated, the person that performed the evaluation and the date(s) of the hazard assessment was completed. This checklist assessment will be integrated into a Job Hazard Assessment (JHA) by Central Safety Services.

If such hazards are present, or are likely to be present, which require personnel to use PPE, individual departments/divisions, with the assistance of Central Safety Services and/or their designated Safety representative will do the following:

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1. Select and have each affected employee use the types of PPE that will protect the affected employee from the hazards identified in the Job Hazard Assessment (JHA);
2. Select the PPE that properly fits each affected employee; AND
3. Communicate selection decisions to each affected employee.

B. Supervisor

When PPE is required to perform job tasks safely, supervisors are responsible for enforcing PPE requirements. Employees who refuse to wear PPE, or are not consistent in its use, shall be subject to disciplinary action in accordance with City rules and procedures.

C. Employees

Employees shall wear PPE when and where required by the Job Hazard Assessment, or shall be subject to disciplinary action. Employees shall be responsible for discarding defective PPE and are responsible for securing the immediate replacement of any PPE. Employees that bring personal PPE equipment into the workplace shall present PPE to supervision to ensure that the PPE meets applicable OSHA/ANSI/ASTM Standards or the PPE shall be removed from the workplace at the discretion of the employer.

D. Central Safety Services

The Central Safety Services Section, in cooperation with all affected departments/divisions within the City of Tucson, shall ensure that each workplace is evaluated to determine whether hazards are present or are likely to be present which necessitate the use of PPE.

Job Hazard Assessments will be kept on file in individual departments/divisions, posted on the Central Safety Services webpage and kept on master file in the Central Safety Services section.

5.0 EDUCATION AND TRAINING

A. All departments/divisions will provide training to each employee who is required by this procedure to use PPE. Such employees shall be trained to understand at least the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust and wear PPE
- The limitations of the PPE
- The proper care, maintenance, useful life and disposal of PPE

B. Supervisors are responsible for validating that an employee has demonstrated an understanding of the training specified above and the

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ability to use PPE properly before being allowed to perform work requiring the use of PPE.

- C.** When the supervisor 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 these employees. Circumstances where retraining is required include, but are not limited to, situations where:
1. Changes in the workplace render previous training obsolete;
 2. Changes in the types of PPE to be used to render previous training obsolete;
 3. An affected employee's knowledge or use of the assigned PPE is inadequate.
- D.** Departments/divisions will verify that each affected employee has received and understands the required training through a written documentation that contains the name of each employee trained, the date(s) of training, and the subject of training.

6.0 GENERAL

A. EYE AND FACE PROTECTION

Employees shall use appropriate eye and/or face protection when exposed to hazards from flying particles, molten metal, liquid chemicals, acidic or caustic liquids, chemical gases or vapors or potentially damaging light radiation.

1. Each affected employee shall use eye protection that provides side protection when there is a hazard from flying objects. Detachable side protectors (e.g. clip-on or slide-on shields) shall meet these requirements.
2. Each affected employee who wears prescription glasses while engaged in operations that involve eye hazards shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription glasses or the protective lenses.
3. Employees who wear prescription eye glasses and who may perform work on exposed, energized electrical systems shall wear only prescription eye glasses made from non-conductive material.
4. Employees who wear prescription glasses that are also required by JHA to wear respiratory protection may request a prescription lens kit for their respirator, from the department.
5. Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.

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6. Each affected employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed to provide protection from injurious light radiation. (See Appendix B).

B. HEAD PROTECTION

Each affected employee shall wear protective helmets when working in areas where there is a potential for injury to the head from falling objects. Protective helmets designed to reduce electrical shock hazard shall be worn by each such affected employee when near exposed electrical conductors that could contact the head.

C. FOOT PROTECTION

Each affected employee shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling and rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards. The City policy for Safety Footwear, including authorization to purchase Safety Footwear, is defined in Administrative Directive 2.03-3.

D. HAND PROTECTION

Where an employee's hands are exposed to hazards, such as those from skin absorption of harmful substances, chemical burns, thermal burns, or harmful temperature extremes, appropriate hand protection must be used. Hand protection shall be chosen based on the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

E. RESPIRATORY PROTECTION

Where employees are required to perform tasks that could be hazardous to the respiratory system, proper respiratory protection must be worn. Reference: OSHM RESPIRATORY PROTECTION PROGRAM – H-001.

F. HEARING PROTECTION

Where employees are exposed to ambient noise, employees may wear hearing protection in the form of ear plugs or ear muffs.

Where employees are exposed to noise from machinery or work process that approaches or exceeds the OSHA decibel threshold of 90db, employees shall be required to wear hearing protection while performing work in the area or while working or training on the process. The employer will post notice in work areas or notice on equipment stating "Hearing Protection Required in this Area".

Where employees are exposed to noise exceeding the OSHA Permissible Exposure Limit (PEL) of 85 db for the Time-weighted Average (TWA) over the work shift, employees shall be required to wear hearing protection at all times while working or training on the process. Employees required to

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wear hearing protection due to noise levels verified by noise monitoring conducted by the Industrial Hygienist approaching or over the OSHA PEL, shall be enrolled the City of Tucson Hearing Conservation Program to annually monitor hearing loss as described in IH-003.

The employer shall have a written policy and shall train all affected employees on the requirement to wear hearing protection for specific tasks associated with the work process or in specific areas of work and shall inform the employee of the limitation of hearing protection.

7.0 ADVICE AND COUNSEL

OSHA 29CFR 1910 Subpart I

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Appendix A

Job Hazard Analysis Personal Protective Equipment Assessment



Department:

Date:

Job Classification:

Evaluator:

Area:

Department Safety Representative or Supervisor

Signature

Eye Protection

Hazards:

- Impact/Flying Objects
- Heat
- Chemicals

- Dusts
- Light/Radiation (Welding, Cutting, etc)
- Other _____

Current PPE:

Recommendations:

Head

Hazards:

- Overhead Hazards
- Bump Hazard

- Electrical
- Other _____

Current PPE:

Recommendations:

Hand and Arm

Hazards:

- Cut/Abrasion
- Heat/Cold
- Electrical
- Biological

Chemicals Liquid/Solid

- Corrosives Acid/Base
- Organic Solvent
- Other _____

Current PPE:

Recommendations:

Foot

- Hazards:
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Impact | <input type="checkbox"/> Puncture |
| <input type="checkbox"/> Compression | <input type="checkbox"/> Metatarsal (Top of Foot) |
| <input type="checkbox"/> Water | <input type="checkbox"/> Electrical/Grounding |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Chemical |
| <input type="checkbox"/> Cold | <input type="checkbox"/> Other _____ |

Current PPE:

Recommendations:

Lungs

- Hazards:
- | | |
|---|---|
| <input type="checkbox"/> Particulate (Dust, Silica, etc.) | <input type="checkbox"/> Gas (Carbon Monoxide, etc) |
| <input type="checkbox"/> Organic Vapor | <input type="checkbox"/> IDLH (Oxygen Deficient, etc) |
| <input type="checkbox"/> Pesticide | <input type="checkbox"/> Acid Gas |
| | <input type="checkbox"/> Other _____ |

Current PPE:

Recommendations:

Noise

- Hazards:
- | | |
|---|--------------------------------------|
| <input type="checkbox"/> Continuous (>85db) | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Impact | |

Current PPE:

Recommendations:

Other

- Hazards:
- | | |
|--|---|
| <input type="checkbox"/> Wet Conditions | <input type="checkbox"/> Disposable Outerwear |
| <input type="checkbox"/> Chemical Exposure | <input type="checkbox"/> Heat/Cold |
| | <input type="checkbox"/> Other _____ |

Current PPE:

Recommendations:

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Appendix B

Recommended Welding Lenses

Application	Base Metal Thickness (inches)	Recommended Shade Number
Arc Welding with 1/16", 3/32", 5/32" electrodes	1/8 to 1/4	10
3/16", 7/32", 1/4 " electrodes	1/4 to 1	12
5/16", 3/8" electrodes	Over 1 inch	14
TIG* welding with non-ferrous 1/16", 3/32", 1/8", 5/32" electrodes	Up to 1/4 inch	11
TIG * welding with ferrous 1/16", 3/32", 1/8", 5/32" electrodes	Up to 1/4 inch	12
Soldering	All	2
Brazing	Up to 1/4	3 or 4
Light Cutting	Up to 1 inch	3 or 4
Medium Cutting	1 to 6 inches	4 or 5
Heaving Cutting	Over 6 inches	5 or 6
Gas Welding (light)	Up to 1/8 inch	4 or 5
Gas Welding (medium)	1/8 to 1/2 inch	5 or 6
Gas Welding (heavy)	Over 1/2 inch	6 or 8

- for MIG welding decrease shade by one

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Appendix B (Con't)

FILTER SHADES FOR WELDING AND CUTTING				
Operations	Electrode diameter, in.	Arc current, A	Minimum protective shade number	Recommended shade number
Shielded-metal-arc welding	< 3/32	< 60	7	-
	3/32-5/32	60-160	8	10
	5/32-1/4	160-250	10	12
	> 1/4	250-550	11	14
Gas-metal-arc and flux-cored-arc welding		< 60	7	-
		60-160	10	11
		160-250	10	12
		250-500	10	14
Gas-tungsten-arc welding		< 50	8	10
		50-150	8	12
		150-500	10	14
Air-carbon-arc welding	Light	< 500	10	12
	Heavy	500-1000	11	14
Plasma-arc welding		< 20	6	6-8
		20-100	8	10
		100-400	10	12
		400-800	11	14
Plasma-arc cutting	Light	< 300	8	9
	Medium	300-400	9	12
	Heavy	400-800	10	14
Torch brazing		-	3	3-4
Torch Soldering		-	2	2
Carbon arc welding		-	14	14