

Hazard Assessment Survey and PPE Selection

Work Location or Operation: _____

Date Worksite Assessment: _____

Worksite Assessment performed by:

	(name)		(title)
	(name)		(title)

This survey guide will help you: (1) implement OSHA’s Personal Protective Equipment Standard-1910.132 and, (2) review common types of hazards inherent in various workplace operations and processes, or as a result of working with or around equipment.

The Occupational Safety and Health Administration requires that employers protect their employees from workplace hazards that can cause an injury. It is always advisable to remove the hazard at its source to afford the best protection for employees who may be exposed to an injury. OSHA recommends the use of engineering controls such as a barrier to protect the employee from the hazard or to change the work practice control or process such as substituting with a less injurious product. When these measures are not feasible or unable to provide sufficient protection, personal protective equipment (PPE) must be provided to prevent injuries from recognized or potential hazards in the workplace. Conduct a walk through survey of your work area and observe if any of the following hazard categories, or others not listed, are present. When a hazard is observed, consider if the hazard can be removed with an effective engineering or workplace control measure.

EHS staff are always available to answer any questions and to assist you with your Hazard Assessment Survey. Please give us a call at 434-982-4911.

In addition to this survey, EHS provides a Hazard Assessment Form for download. Visit the [PPE webpage](#) for more information.

Basic hazard categories to consider for the Hazard Assessment Survey:

1. IMPACT	5. HEAT
2. PENETRATION	6. HARMFUL DUST
3. COMPRESSION, ROLLOVER	7. LIGHT (OPTICAL) RADIATION
4. CHEMICAL	

1. **IMPACT HAZARD CATEGORY** - The majority of impact injuries result from flying or falling objects, or sparks striking the eye. Most of these objects are smaller than a pin head and can cause serious injury such as punctures, abrasions, and contusions.

Mark yes or no

- (A) Impact or potential impact hazards exist?
 No? Continue with (2) PENETRATION. _____
- (B) Are hazards being controlled with guards, engineering controls
 or other effective means? _____
 If NO, is it feasible to implement these controls?
 Recommendations: _____

Mark yes or no

- (C) Is PPE currently assigned and provided for employees exposed to impact hazards?

- If Yes:
- (1) Does the equipment meet the required ANSI standards? _____
- (2) Has equipment been properly fitted to the employee? _____
- (3) Is equipment routinely cleaned and inspected by
 assigned employees to ensure equipment is in good condition? _____
- (4) Is damaged equipment promptly removed from service? _____
- (5) Have employees been trained on the assigned PPE? (Proper donning,
 doffing, cleaning, inspecting and recognizing any limitations of the equipment)

If No, recommended PPE: _____

Follow through with training on the assigned PPE

2. PENETRATION HAZARD CATEGORY - Sources of sharp objects that can pierce feet or hands,
 (i.e. construction, renovation and demolition areas where debris can include nails, tacks)
 or cut hands, (i.e. handling cutting tools, sharp edged metal or rough lumber).

Mark yes or no

- (A) Penetration or potential penetration hazards exist?
 No? Continue with (3) COMPRESSION (Roll Over). _____
- (B) Are hazards being controlled with guards, engineering
 controls or other effective means? _____

If NO, is it feasible to implement these controls?

Recommendations:

Mark yes or no

- (C) Is PPE currently assigned and provided for employees exposed to
 penetration hazards? _____
- If Yes:
- (1) Does the equipment meet the required ANSI standards? _____
- (2) Has equipment been properly fitted to the employee? _____
- (3) Is equipment routinely cleaned and inspected by assigned employees
 to ensure equipment is in good condition? _____
- (4) Is damaged equipment promptly removed from service? _____
- (5) Have employees been trained on the assigned PPE? (Proper donning, doffing,

cleaning, inspecting and recognizing any limitations of the equipment)

If No, recommended PPE: _____
 Follow through with training on the assigned PPE

3. COMPRESSION (ROLL OVER) HAZARD CATEGORY - Sources for falling, dropping or moving objects (i.e. - material handling, warehouses and construction, renovation or demolition sites.) Pinch or grab points for hands.

Mark yes or no

(A) Compression (roll over) hazards exist?
 No? Continue with (4) CHEMICAL. _____

(B) Are hazards being controlled with guards, engineering controls or other effective means?
 If NO, is it feasible to implement these controls?
 Recommendations:

(C) Is PPE currently assigned and provided for employees exposed to compression (roll over) hazards? _____
 If Yes:
 (1) Does the equipment meet the required ANSI standards? _____
 (2) Has equipment been properly fitted to the employee? _____
 (3) Is equipment routinely cleaned and inspected by assigned employees to ensure equipment is in good condition? _____
 (4) Is damaged equipment promptly removed from service? _____
 (5) Have employees been trained on the assigned PPE? (Proper donning, doffing, cleaning, inspecting and recognizing any limitations of the equipment)

If No, recommended PPE: _____
 Follow through with training on the assigned PPE

4. CHEMICAL HAZARD CATEGORY - Chemical handling (i.e. - mixing, diluting, application. lab procedures). Please use these additional EHS resources to help you with your Chemical Hazard Assessment: [Chemical contact hazards](#) - note section *Personal Protective Equipment and Attire* page (21-25); and for potential [inhalation hazards](#) and consideration for [respirators](#).

Mark yes or no

(A) Chemical hazards or potential chemical release hazards exist?
 No? Continue with (5) HEAT. _____

(B) Are operations performed in poorly ventilated areas? _____

(C) Could work operations involve an accidental release or spill? _____

- (D) Are hazards being controlled with engineering controls (i.e. ventilation, chemical process containment)? _____
 If no, is it feasible to implement these controls? _____
 Recommendations: _____

- Mark yes or no**
- (E) Is PPE currently assigned and provided for employees exposed to chemical hazards? _____
 If Yes:
- (1) Does the equipment meet the required ANSI standards? _____
 - (2) Has equipment been properly fitted to the employee? _____
 - (3) Is equipment routinely cleaned and inspected by assigned employees to ensure equipment is in good condition? _____
 - (4) Is damaged or contaminated equipment promptly removed from service? _____
 - (5) Have employees been trained on the assigned PPE? (Proper donning, doffing, cleaning, inspecting and recognizing any limitations of the equipment) _____

If No, recommended PPE: _____
 Follow through with training on the assigned PPE

5. HEAT HAZARD CATEGORY - Sources of high heat temperature that could result in burns, eye injuries or ignition of clothing. Examples may include welding, brazing operations or working around molten metals

- Mark yes or no**
- (A) Heat hazards present? _____
 No? Continue with (6) HARMFUL DUST. _____
- (B) Are hazards being controlled with guards, engineering controls or other effective means? _____
 If NO, is it feasible to implement these controls? _____
 Recommendations: _____
- (C) Is PPE currently assigned and provided for employees exposed to heat hazards? _____
 If Yes:
- (1) Does the equipment meet the required ANSI standards? _____
 - (2) Has equipment been properly fitted to the employee? _____
 - (3) Is equipment routinely cleaned and inspected by assigned employees to ensure equipment is in good condition? _____
 - (4) Is damaged equipment promptly removed from service? _____
 - (5) Have employees been trained on the assigned PPE? (Proper donning, doffing, cleaning, inspecting and recognizing any limitations of the equipment) _____

If No, recommended PPE: _____
 Follow through with training on the assigned PPE

6. HARMFUL DUST HAZARD CATEGORY - Sources (i.e. - machine operations, carpentry shop, fabrication shops, using power tools & equipment, sanding, and construction, renovation and demolition activities).

Mark yes or no

(A) Harmful dust hazards exist? _____
 No? Continue with (7) LIGHT (OPTICAL) RADIATION. _____

(B) Are hazards being controlled with guards, engineering controls or other effective means? _____
 If NO, is it feasible to implement these controls? _____
 Recommendations: _____

(C) Is PPE currently assigned and provided for employees exposed to harmful dust hazards? _____

If Yes:

- (1) Does the equipment meet the required ANSI standards? _____
- (2) Has equipment been properly fitted to the employee? _____
- (3) Is equipment routinely cleaned and inspected by assigned employees to ensure equipment is in good condition? _____
- (4) Is damaged equipment promptly removed from service? _____
- (5) Have employees been trained on the assigned PPE? (Proper donning, doffing, cleaning, inspecting and recognizing any limitations of the equipment) _____

If No, recommended PPE: _____
 Follow through with training on the assigned PPE

7. LIGHT (OPTICAL) RADIATION HAZARD CATEGORY - Sources (i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, lasers). Refer to the accompanying appendix for correct filter lenses to protect from radiant energy.

Mark yes or no

(A) Light (optical) radiation hazards exist? _____

(B) If yes, are hazards being controlled with guards, engineering controls or other effective means? _____
 If NO, is it feasible to implement these controls? _____
 Recommendations: _____

(C) Is PPE currently assigned and provided for employees exposed to light (optical) radiation hazards? _____

If Yes:

(1) Does the equipment meet the required ANSI standards? _____

(C) Continued

Mark yes or no

(2) Has equipment been properly fitted to the employee? _____

(3) Is equipment routinely cleaned and inspected by assigned employees to ensure proper functioning of the equipment? _____

(4) Is damaged equipment promptly removed from service? _____

(5) Have employees been trained on the assigned PPE? (Proper donning, doffing, cleaning, inspecting and recognizing any limitations of the equipment) _____

If No, recommended PPE: _____

Follow through with training on the assigned PPE

APPENDIX (1)

Filter Lenses for Protection Against Radiant Energy – OSHA 1910.133 Eye and Face Protection Chart

Operations	Electrode Size 1/32 in.	Arc Current	Minimum(*) Protective Shade
Shielded metal arc welding	Less than 3	Less than 60 ...	7
	3-5	60-160	8
	5-8	160-250	10
	More than 8	250-550	11
Gas metal arc welding and flux cored arc welding		less than 60	7
		60-160	10
		160-250	10
		250-500	10
Gas Tungsten arc welding		less than 50	8
		50-150	8
		150-500	10
Air carbon Arc cutting	(Light)	Less than 500	10
	(Heavy)	500-1000	11
Plasma arc welding		Less than 20	6
		20-100	8
		100-400	10
		400-800	11
Plasma arc cutting	(light)**	Less than 300	8
	(medium)**	300-400	9
	(heavy)**	400-800	10
Torch brazing			3
Torch soldering			2
Carbon arc welding			14

Filter Lenses for Protection Against Radiant Energy

Operations	Plate thickness-inches	Plate thickness-mm	Minimum(*) Protective Shade
Gas Welding:			
Light	Under 1/8	Under 3.2	4
Medium	1/8 to 1/2	3.2 to 12.7	5
Heavy	Over 1/2	Over 12.7	6
Oxygen cutting:			
Light	Under 1	Under 25	3
Medium	1 to 6	25 to 150	4
Heavy	Over 6	Over 150	5

Footnote(*) As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade which gives sufficient view of the weld zone without going below the minimum. In oxyfuel gas welding or cutting where the torch produces a high yellow light, it is desirable to use a filter lens that absorbs the yellow or sodium line in the visible light of the (spectrum) operation.

Footnote(**) These values apply where the actual arc is clearly seen. Experience has shown that lighter filters may be used when the arc is hidden by the workpiece.

