


<i>HEALTH AND SAFETY MANUAL</i>		
Title: Personal Protective Equipment		
Approved by: Greg Savoy		4/4/13

1 Purpose/Scope:

The purpose of the Personal Protective Equipment section is to set forth the procedures for the use, care, and maintenance of personal protective equipment required to be used by employees for the prevention of injuries.

This policy applies to all Company employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

2 Responsibilities:

2.1 Responsibilities:

2.1.1 Supervisors are responsible for implementation of company requirements for the proper use, care, and maintenance of personal protective equipment worn by employees under their supervision.

2.1.2 Employees are responsible to learn about and use personal protective equipment according to company requirements.

2.1.3 PPE is provided, used and **MUST** be maintained in a sanitary and reliable condition.

3 Requirements:

3.1 General:

3.1.1 Employee owned equipment is **NOT** permitted, except for safety toe footwear and prescription safety glasses.

Defective or damaged PPE shall **NOT** be used.

3.1.2 All employees will know and follow the procedures outlined in the following:

3.2 Eye Protection:

The Company will reimburse employees \$75.00 every two years for ANZI 87.1 approved safety glasses w/rigid side shields (side shields may be removable). Employees shall be responsible for the cost of the prescription and any amount over

\$75.00. To receive reimbursement employees must provide safety department with proof prescription glasses are ANZI 87.1 approved and copy of purchase receipt.

3.2.1 Safety glasses, with side shields, that meet ANSI Z-87.1-2003 standards with “high Impact lenses” are required to be worn by all employees, subcontractors, and visitors while on company property, at all times, as described below:

- At field locations, in shops and warehouses, except in approved, designated, striped safety zones.
- In all yard work zones or by everyone when in the vicinity of loading or unloading equipment, performing mechanic or maintenance work, test stand operations, operating equipment such as forklifts, welding, or any type of work which has the potential to inflict an eye injury.
- In any office, restroom, or any other building while performing any type of work where a potential eye injury may be present.
- Visitors will be provided with visitor glasses.
- In the absence of approved prescription safety glasses, “Over the glass” type safety glasses or goggles, must be worn over the non-safety glasses until approved prescription safety glasses are obtained.
- Workers assisting welders must wear absorbent safety glasses that protect the wearer from ultra-violet (UV) and/or infrared rays (IR).
- Reference the Welding Lens Chart; paragraph 3.2.5 of this section for the correct shade.
- Dark shaded lens (sunglasses) darker than a # 1 shade are prohibited to be worn indoors unless welding or assisting a welder.
- A doctor must support “exceptions for medical reasons” in writing to exempt safety eyewear requirements.

3.2.2 Safety glasses are not required:

- Inside offices.
- Parking lots when traveling from vehicles to and from office buildings by way of main doors that do not pass through shops.

3.2.3 Goggles:

- Chemical splash proof goggles shall be worn when handling or mixing liquid chemicals, solvents, paints, etc., and/or as recommended on the Material Safety Data Sheet (MSDS) of the material being handled.
- Dust proof goggles shall be worn when blowing equipment down with air or while performing other jobs where safety glasses are not adequate to prevent airborne particles from entering the openings around the lenses and side shields.

3.2.4 Face shields:

- Full face shields shall be worn over safety glasses when operating hand held or stationery grinders with abrasive or wire wheels, while chipping paint or concrete or, performing jobs where there is the
- potential for flying objects striking the face and safety glasses or goggles would not provide adequate protection.

3.2.4 Welding Lens Chart:

WELDING OPERATION	LENS SHADE NO.
Shielded metal arc, 1/16"-5/32"	10
Gas-shielded arc, nonferrous, 1/16"-5/32"	11
Gas-shielded ferrous, 1/16"-5/32"	12
Shielded metal arc, 3/16"-1/4"	12
Shielded metal arc, 5/16"-3/8"	14
Atomic hydrogen welding	10-14
Carbon arc welding	14
Soldering	2
Torch brazing	3-4
Light cutting up to 1"	3-4
Medium cutting up to 6"	4-5
Heavy cutting over 6"	5-6
Gas welding up to 1/8"	4-5
Gas welding, 1/8"-1/2"	5-6
Gas welding over 1/2"	6-8

3.3 Head Protection:

3.3.1 Hardhats:

- Employees must wear protective helmets when working in areas where there is a potential for injury to the head from falling objects.
- Hardhats, which meet ANSI Z 89.1-1997 Class E & G standards, are to be worn at all field, shop and warehouse locations, or where deemed necessary as per each location's PPE Hazard Assessment (see paragraph 3.9).
- Hardhats will not be altered in any way.
- Do not paint or apply unauthorized stickers, name plates, etc.
- Do not drill, cut, bend, or apply heat.
- Do not alter the suspension system.
- Hardhats will be inspected by the employee regularly for cracks, chips, scratches, signs of heat exposure (sun cracks), etc.
- Defective hardhats will be replaced immediately.
- Hardhats shall not be placed in rear windows of vehicles where they will be exposed to the sun or become projectiles during an accident.
- A supply of hardhats must be made available to visitors.
- The company shall provide hardhats.
- Employees will be trained in the use, care and maintenance of head protection equipment.

3.4 Hearing Protection:

3.4.1 Hearing protection is required to be worn by all employees, subcontractors, and visitors while in posted “High Noise” areas.

- Refer the Company Hearing Conservation Program for more information.

3.4.2 Warning signs will be posted in areas known or suspected to have noise levels exceeding 85 dBA either constantly or intermittently.

- When signs are not posted, employees shall wear hearing protection when noise caused by machinery, tools, etc., prevents normal conversations to be heard clearly.
- Rule of thumb: If you have to yell to be heard, hearing protection is required

3.4.3 Types:

- Molded Inserts (ear plugs)
- Canal Caps (head band type)
- Muff, either headband or hard hat mounted
- Earmuffs and earplugs shall be provided to the employee in sizes and configurations that will be comfortable to the employee.

3.4.4 Care and maintenance:

- Inspect hearing protection prior to each use.
- Hearing protection must be kept clean to prevent ear infections.
- Most earplugs used today are disposable and must be discarded when they become dirty, greasy, or cracked.
- Earmuffs that have deteriorated foam inserts, cracked seals or are defective must be replaced.

3.4.5 Fit:

- Due to individual differences, not everyone can wear the same type of hearing protection. A variety of styles may have to be tried before one is found to be comfortable and provide adequate protection.
- Employees shall be instructed how to obtain the proper fit.

3.5 Hand Protection:

3.5.1 Gloves:

- Gloves are required to be worn when performing work, which may expose the hands to extreme temperatures, cuts and abrasions, or exposure to chemicals.
- Welding: Welding gloves made of leather or other heat resistant materials shall be worn when performing arc welding or oxy/gas cutting.
- Chemical: Impervious (chemical resistant) gloves shall be worn when handling chemicals that specify gloves as personal protection equipment when handling.
- Refer to the specific chemical’s Material Safety Data Sheet for the correct glove type.

- Persons assigned to working with chemicals, i.e., solvent vats, shall be issued their own individual gloves for hygiene purposes.
- Leather: Leather gloves should be worn when working with sharp materials or when handling rigging equipment.
- Cloth: Cloth gloves should be worn when handling objects or materials, which could cause blisters, splinters, cuts, etc.
- Heat Resistant: Heat resistant gloves shall be worn when handling hot bearings, races, or other materials or objects that have been heated beyond ambient temperatures.
- Insulated: Insulated gloves shall be worn to prevent frostbite in extreme cold climates.
- Glove Inspections:
- Gloves shall be inspected before each use for holes, tears, and worn areas.
- Chemical gloves shall be periodically air tested for pinholes by twisting the cuff tightly, apply low air pressure to expand the glove, and then submersing in water to check for bubbles.
- Defective gloves shall be discarded immediately.
- Exception: machinists are exempted from wearing gloves while working with rotating machinery.

3.6 Safety Footwear:

- 3.6.1 Safety footwear shall be worn by all employees with regularly assigned duties at field locations, in shops and warehouses.
- Office workers and visitors who enter these areas on an infrequent basis will not be required to wear foot protection provided they stay clear of the work being performed.
 - If required to be in the close proximity of the work, the work will be stopped while visiting the area or safety footwear will be worn.
- 3.6.2 Shops, Field Locations, Warehouses and Parts Departments: Leather or equivalent boots, either lace up or pull up, shall be worn.
- The boot must provide ankle protection and have soles designed to protect from punctures with defined heels for climbing ladders.
 - Metatarsal guards will be worn when duties present a hazard of equipment or material crushing the foot.
- 3.6.3 All safety footwear must meet ANSI Z41-1999 and ASTM F-2413 standards.
- 3.6.4 Client locations may require safety footwear to be worn by everyone; check with the local supervisor for client requirements before visiting field locations.

3.7 Fall Protection:

- 3.7.1 Personal fall protection is required when performing certain elevated jobs in excess of six feet (offshore 4 feet).
- Consult the Company Fall Protection Program.

3.8 Electrical Protection:

3.8.1 Consult the Company Electrical Safety Program.

3.9 PPE Hazard Assessment:

3.9.1 A PPE Hazard Assessment (see Exhibit P-1.1) shall be completed by each location's operating supervisor to determine if hazards are present or are likely to be present, which necessitates the use of PPE. Specific PPE shall be selected and identified on the Hazard Assessment for hazards identified.

- The results of this assessment shall be communicated to each affected employee and kept at the local office.
- Selected/identified PPE shall be fitted to each affected employee.
- Exemptions for use of PPE must be supported by the PPE hazard assessment.

3.10 Training:

3.10.1 Each employee who requires PPE shall be properly trained.

- Training shall include:
- When PPE is necessary.
- What PPE is necessary.
- How to properly don, doff, adjust and wear PPE.
- The limitations of PPE.
- How to maintain PPE in a sanitary and reliable condition.

3.10.2 Retraining is required when:

- The workplace changes, making the previous training obsolete.
- The type of PPE changes.
- When the employee demonstrates lack of use, improper use, or insufficient skill or understanding in PPE selection, necessity, use and limitations.

3.10.3 Training shall be documented and records kept at the local office.

- The training documentation shall include:
- Name of employee(s) trained;
- The dates of training; and
- The training subject.

4 References:

4.1 29 CFR 1910 Subpart I.4.2 29 CFR 1926 Subpart E.

5 Exhibits: P-1.1 PPE Hazard Assessment.

EXHIBIT P-1.1

PPE HAZARD ASSESSMENT			Place an "X" if applicable
Location:			
Hazard(s) Present	Required PPE - Eyes	Remarks	
1. Flying Particles	Safety glasses	Also wear a full face shield	
2. Chemical Splashes	Chemical resistant goggles	Also wear a full face shield	
work locations: field, shop, yard			
3. Intense Light	Welding hood with correct lens shade in use.	Shade must be appropriate to type of welding operation.	
4. Hazardous Liquid Chemicals	Chemical resistant goggles	Also wear a full face shield	
5. Caustics and acids	Chemical resistant goggles	Also wear a full face shield	
6. Refueling equipment	Chemical resistant goggles	Also wear a full face shield	
7. Working with or handling metal	Safety glasses		
Hazard(s) Present	Required PPE - Head	Remarks	
1. Working under catwalks, piping	Hard Hat		
2. Falling Objects	Hard Hat		
Hazard(s) Present	Required PPE - Ears	Remarks	
1. Loud noise	Hearing Protection	Ear Plugs(molded), Canal Caps, Muffs	
2. Loud work environment	Hearing Protection	Ear Plugs(molded), Canal Caps, Muffs	
Hazard(s) Present	Required PPE - Hands	Remarks	
1. Extreme Temperatures	Insulated\Heat resistant gloves		
2. Cuts and abrasions	Leather gloves		
3. Flying Particles	Leather gloves		
4. Welding	Welding gloves		
5. Chemicals	Chemical resistant gloves	Refer to MSDS for correct type of gloves.	
6. Handling rigging equipment	Leather gloves	Chains, wire rope slings, cables, etc.	
7. Material/Metal Handling	Leather or cotton gloves	Leather gloves when working with sharp material.	
8. Caustic or Acids	Chemical resistant gloves	Check MSDS for appropriate gloves.	
Hazard(s) Present	Required PPE - Foot	Remarks	
1. Falling Objects	Leather Safety Footwear		
2. Fluids	Rubber Safety Footwear		
Hazard(s) Present	Required PPE - Body	Remarks	
1. Working at heights	Fall Protection	Used when work levels exceed 6 feet or higher. Refer to UCI Fall Protection policy.	
2. Fire	Flame Retardant clothing	Required by specific customers, know customers PPE requirements prior to entering location.	
3. Caustic and Acids	Chemical resistant Apron	Refer to MSDS for correct type.	

Assessment Completed by: _____ Date: _____