



# ***Don H. Mahaffey Drilling Co.***

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***PERSONAL PROTECTIVE EQUIPMENT***

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YOUR OSHA COMPLIANCE SOLUTION

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Questions? Call 1-800-734-3574



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## 1 OBJECTIVE

It is the intent of Don H. Mahaffey Drilling Co. to provide a safe and healthy workplace for employees. In the development and implementation of a Personal Protective Equipment (PPE) program, the goal to prevent or reduce occupational injury and illness can be achieved. The Personal Protective Equipment program is designed and consistent with the California Code of Regulations, Title 8, Sections 1514 – 1522.

## 2 PROGRAM ADMINISTRATOR

Don H. Mahaffey Drilling Co. has designated Ashley Mahaffey Tullius for the implementation of the Personal Protective Equipment program. Ashley Mahaffey Tullius is responsible for:

- a. Identifying work areas, processes, or tasks that require the use of appropriate PPE;
- b. Enforcing the proper care and use of PPE;
- c. Maintaining records pertaining to the program; and
- d. Maintaining, reviewing, and updating the PPE program as needed.

## 3 PERSONAL PROTECTIVE EQUIPMENT, AN EXPLANATION OF

Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

### 3.1 General Requirements

- 3.1.1 Employees are required to use the required personal protective equipment.
- 3.1.2 Personal protective equipment required will be approved for its intended use as provided in California Code of Regulations, Title 8, Section 1505 and distinctly marked so as to facilitate identification of the manufacturer.  
  
*EXCEPTION: Shields, barriers, etc. manufactured by Don H. Mahaffey Drilling Co..*
- 3.1.3 Personal protective equipment will be used in accordance with the manufacturer's instructions.
- 3.1.4 All required safety devices and safeguards, whether company or employee provided, including personal protective equipment for the eyes, face, head, hand, foot, and extremities (limbs), protective clothing, respiratory protection, protective shields and barriers, comply with the applicable Title 8 standards and are maintained in a safe, sanitary condition.

- 3.1.5 Protectors will be of such design, fit and durability as to provide adequate protection against the hazards for which they are designed. They will be reasonably comfortable and will not unduly encumber the employee's movements necessary to perform his or her work.

### **3.2 Hazard Assessment and Equipment Selection**

- 3.2.1 The workplace will be assessed to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the following will occur:
  - a. Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;
  - b. Communicate selection decisions to each affected employee; and
  - c. Select PPE that properly fits each affected employee.
- 3.2.2 The required workplace hazard assessment will be verified it has been performed through a written document which will serve as a certification of hazard assessment, that identifies:
  - a. The workplace evaluated;
  - b. The person certifying that the evaluation has been performed; and
  - c. The date(s) of the hazard assessment.
- 3.2.3 Defective and damaged personal protective equipment will not be used.

### **3.3 Training**

- 3.3.1 Each employee who is required to use PPE will be provided training. Each such employee will be trained to know at least the following:
  - a. When PPE is necessary;
  - b. What PPE is necessary;
  - c. How to properly don, doff, adjust, and wear PPE;
  - d. The limitations of the PPE; and
  - e. The proper care, maintenance, useful life and disposal of the PPE.
- 3.3.2 Each affected employee will demonstrate an understanding of the training specified in section 3.3.1 of this program, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.
- 3.3.3 When management or supervisors have reason to believe that any affected employee who has already been trained does not have the understanding and skill required by section 3.3.2 of this program, each such employee will be retrained. Circumstances where retraining is required include, but are not limited to, situations where:
  - a. Changes in the workplace render previous training obsolete; or
  - b. Changes in the types of PPE to be used render previous training obsolete; or
  - c. Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.



- 3.3.4 Each affected employee who has received and understood the required training will be verified through a written certification that contains the name of each employee trained, the date(s) of training, and that identifies the subject of the certification.

### **3.4 Sanitation**

Personal protective equipment will be kept clean and in good repair. Safety devices, including protective clothing worn by the employee, will not be interchanged among the employees until properly cleaned.

*Exception: Safety devices worn over shoes or outer clothing, no part of which contacts the skin of the wearer, such as metal footguards.*

## **4 HEAD PROTECTION**

Employees working in locations where there is a risk of receiving head injuries from flying or falling objects and/or electric shock and burns will wear approved head protection in accordance with this section.

### **4.1 Criteria for Head Protection**

When head protection is required, the employer will provide each employee with head protection that meets the criteria in one of the following standards, which are hereby incorporated by reference:

- a. American National Standards Institute (ANSI)/International Safety Equipment Association (ISEA) Z89.1-2009, "American National Standard for Industrial Head Protection;"
- b. ANSI Z89.1-2003, "American National Standard for Industrial Head Protection;" or
- c. ANSI Z89.1-1997, "American National Standard for Industrial Head Protection."

### **4.2 General Requirements**

- 4.2.1 The appropriate impact type helmet will be selected and used by employees.
- 4.2.2 The appropriate electrical class of ANSI designated helmet will be selected and used in accordance with the following:
  - a. When there is no risk of head injury from contact with electrical conductors, and protective helmets are only required to reduce the danger of injury from flying or falling objects, protective helmets will be ANSI-Z89.1 designated Class C, E, or G.
  - b. When there is a risk of head injury from contact with conductors less than 600 volts, protective helmets will be ANSI-Z89.1 designated Class E or G.
  - c. When there is a risk of head injury from contact with conductors greater than 600 volts, protective helmets will be ANSI-Z89.1 designated Class E.

- 4.2.3 The head protection provided for each employee exposed to high-voltage electric shock and burns will also meets the specifications contained in Section 9.7 “Electrical Insulation” of any of the consensus standards identified in section 4.1 of this program.
- 4.2.4 Each approved protective helmet required by section 4.1 will bear the permanent markings required by the ANSI standard under which it was approved. At a minimum, the marking will identify the manufacturer, ANSI designated standard number and date, and ANSI designated class and impact type of helmet.
- 4.2.5 Where there is a risk of injury from hair entanglements in moving parts of machinery, combustibles or toxic contaminants, employees will confine their hair to eliminate the hazard.

## **5 EYE AND FACE PROTECTION**

### **5.1 Eye and Face Requirements**

- 5.1.1 Employees working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays which are inherent in the work or environment, will be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby employees.
- 5.1.2 Employees will be provided with and required to use protection suitable for the exposure.
- 5.1.3 Where exposed to injurious light rays, the shade of lens to use in any instance will be selected in accordance with the following table.
- 5.1.4 Protection against radiant energy--Selection of shade numbers for welding filter. Table 1 will be used as a guide for the selection of the proper shade numbers of filter lenses or plates used in welding. Shade more dense than those listed may be used to suit the individual's needs.

<b>Table 1: Filter Lens Shade Numbers for Protection Against Radiant Energy</b>		
<b>Welding Operation</b>		<b>Shade Number</b>
Shielded metal-arc welding	1 1/16-, 3/32-, 1/8, 5/32-inch diameter electrodes	10
Gas-shielded arc welding (nonferrous)	1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	11
Gas-shielded arc welding (ferrous)	1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	12
Shielded metal-arc welding	3/16-, 7/32-, 1/4-inch diameter electrode	12
	5/16-, 3/8-inch diameter electrodes	14
Atomic hydrogen welding	...	10-14
Carbon-arc welding	...	14
Soldering	...	2
Torch brazing	...	3 or 4
Light cutting	Up to 1 inch	3 or 4
Medium cutting	1 inch – 6 inches	4 or 5
Heavy cutting	Over 6 inches	5 or 6
Gas welding (light)	Up to 1/8-inch	4 or 5
Gas welding (medium)	1/8-inch to 1/2-inch	5 or 6
Gas welding (heavy)	Over 1/2 -inch	6 or 8

- 5.1.5 Where eye protection is required and the employee requires vision correction, such eye protection will be provided as follows:
- Safety spectacles with suitable corrected lenses, or
  - Safety goggles designed to fit over spectacles, or
  - Protective goggles with corrective lenses mounted behind the protective lenses.

- 5.1.6 Side shield protection will be used whenever the hazard of flying objects is angular as well as frontal.

## 5.2 Laser Protection.

- 5.2.1 Employees whose occupation or assignment requires exposure to laser beams will be furnished suitable laser safety goggles which will protect for the specific wavelength of the laser and be of optical density (O.D.) adequate for the energy involved. Table 2 lists the maximum power or energy density for which adequate protection is afforded by glasses of optical densities from 5 through 8.



<b>Table 2: Selecting Laser Safety Glass</b>		
<b>Intensity</b>		<b>Attenuation</b>
<b><i>CW Maximum Power Density (watts/cm<sup>2</sup>)</i></b>	<b><i>Optical Density (O.D.)</i></b>	<b><i>Attenuation Factor</i></b>
10 <sup>-2</sup>	5	10 <sup>5</sup>
10 <sup>-1</sup>	6	10 <sup>6</sup>
1.0	7	10 <sup>7</sup>
10.0	8	10 <sup>8</sup>

*Note: Output levels falling between lines in this table will require the higher optical density.*

5.2.2 All protective goggles will bear a label identifying the following data:

- The laser wavelengths for which use is intended;
- The optical density of those wavelengths; and
- The visible light transmission.

### 5.3 Criteria for Protective Eye and Face Protection

5.3.1 Design, construction, testing and use of devices for eye and face protection purchased after January 12, 1995 will be in accordance with American National Standard, Practice for Occupational and Educational Eye and Face Protection, Z87.1-1989, which is hereby incorporated by reference, except that integral lens and frame design will be allowed if the lens frame combination provides unit strength, as well as impact, penetration, heat and flammability resistance, optical qualities and eye zone coverage equal to or greater than is required by ANSI Z87.1-1989.

5.3.2 Eye and face protection purchased on or before January 12, 1995 will be designed, constructed, and used in accordance with American National Standard (ANSI) Z87.1-1968, which is hereby incorporated by reference.

## 6 FOOT PROTECTION

Injuries may be prevented by the use of appropriate footwear. For example, chemical-resistant boots may provide protect from caustic, reactive, toxic or corrosive materials during cleaning, or surface preparation; or slip-resistant soled shoes can reduce slips and falls on wet or slippery surfaces.

### 6.1 General Requirements

6.1.1 Appropriate foot protection will be required for employees who are exposed to foot injuries from electrical hazards, hot, corrosive, poisonous substances, falling objects, crushing or penetrating actions, which may cause injuries or who are required to work in abnormally wet locations.

- 6.1.2 Footwear which is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injuries will not be worn.

## **6.2 Criteria for Protective Footwear**

- 6.2.1 Protective footwear for employees purchased after January 26, 2007 will meet the requirements and specifications in American Society for Testing and Materials (ASTM) F 2412-05, Standard Test Methods for Foot Protection and ASTM F 2413-05, Standard Specification for Performance Requirements for Foot Protection which are hereby incorporated by reference.
- 6.2.2 Protective footwear purchased on or before January 26, 2007 will meet the requirements of either the American National Standard for Personal Protection -Protective Footwear, American National Standards Institute (ANSI) Z41-1999, or the American Society for Testing and Materials (ASTM) F2412-05, Standard Test Methods for Foot Protection and ASTM F 2413-05, Standard Specification for Performance Requirements for Foot Protection which are hereby incorporated by reference.

## **7 BODY PROTECTION**

Employees who face possible bodily injury of any kind that cannot be eliminated through engineering, work practice or administrative controls, will 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 injury:

- a. Temperature extremes;
- b. Hot splashes from molten metals and other hot liquids;
- c. Potential impacts from tools, machinery and materials; and
- d. Hazardous chemicals.

### **7.1 General Requirements**

- 7.1.1 Appropriate body protection will be required for those employees whose work exposes them to injurious materials.
- 7.1.2 Clothing appropriate for the work being done will be worn. Loose sleeves, tails, ties, frills, lapels, cuffs, or other loose clothing will not be worn around machinery in which it might become entangled.
- 7.1.3 Clothing saturated or impregnated with flammable liquids, corrosive substances, irritants, or oxidizing agents will be promptly removed, and will not be worn until cleaned.

## **8 HAND PROTECTION**

Proper selection and use of appropriate hand PPE can prevent or minimize illness and/or injury due to chemical or physical hazards, such as burns, cuts, electrical shock, amputation, and absorption or contact with chemical or biological hazards.

## 8.1 General Requirements

- 8.1.1 Appropriate hand protection will be selected, provided and required to use by employee when employee's hands are exposed to hazards such as those from skin absorption of harmful substances, cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, radioactive materials, and harmful temperature extremes.

*EXCEPTION: Hand protection for cuts, lacerations, and abrasions will not be required when the employer's personal protective equipment hazard assessment, required by California Code of Regulations, Title 8, Section 3380(f), determines that the risk of such injury to the employee's hands is infrequent and superficial.*

- 8.1.2 Hand protection, such as gloves, will not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials.

*EXCEPTION: Machinery or equipment provided with a momentary contact device as defined in California Code of Regulations, Title 8, Section 3941.*

## 9 LIFE RINGS AND PERSONAL FLOTATION DEVICES

- 9.1 At least one U.S. Coast Guard approved 30-inch life ring with not less than 90 feet of 600 pound capacity line attached will be kept in a conveniently accessible place where employees work exposes them to the hazard of drowning or each employee so exposed will wear a U.S. Coast Guard approved personal flotation device.

*EXCEPTION: Flume Patrol. Flumes provided with caps as described in California Code of Regulations, Title 8, Section 3207.*

- 9.2 Any personal flotation device will be approved by the United States Coast Guard as a Type I PFD, Type II PFD, Type III PFD, or their equivalent, pursuant to 46 CFR 160 (Coast Guard Lifesaving Equipment Specifications) and 33 CFR 175.23 (Coast Guard table of devices equivalent to personal flotation devices.)
- 9.3 Personal flotation devices will be maintained in good condition. They will be removed from service when damaged so as to affect their buoyant properties or capability of being fastened.

## 10 ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT

### 10.1 Protection from Electric Shock

- 10.1.1 Suitable protective equipment or devices will be provided and used on or near energized equipment for the protection of employees where there is a recognized hazard of electrical shock or burns.
- 10.1.2 When protective insulating equipment is used, it will comply with the California Code of Regulations, Title 8, Electrical Safety Orders.

- 10.1.3 In lieu of other protective equipment, barricades will be used to provide protection from exposed, energized equipment.
- 10.1.4 Before work begins, Don H. Mahaffey Drilling Co. will ascertain by inquiry, direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool or machine into physical or electrical contact with the electric power circuit.
  - a. Where such circuits exist, a legible marking will be made indicating the presence and location of the energized circuit(s), or warning signs will be posted in accordance with California Code of Regulations, Title 8, Section 3340.
  - b. Employees will be advised of the location of such energized circuits, the hazards involved, and the protective measures to be taken in accordance with California Code of Regulations, Title 8. Section 1509.




## **10.2 Respiratory Protection**






When required, employees will refer to the Respiratory Protection program for further training and instruction.

## **10.3 Noise Exposure and Hearing Protection**

When required, ear protection will be provided and employees will be required to wear the ear protection. Employees will refer to the Noise Exposure and Hearing Protection program for further training and instruction.

## APPENDIX 1 – PPE HAZARD ASSESSMENT CERTIFICATE

I am reviewing (check the appropriate box):	<input type="checkbox"/> A worksite	Specify location:	
	<input type="checkbox"/> A single employee's operation	Name of employee:	
	<input type="checkbox"/> A class of operation	Position title:	
		Position titles:	
		Location:	
Your Name:		Department/Division:	Date: Click or tap to enter a date.
	<b>EYE HAZARDS:</b> Tasks that can cause eye injury include: working with chemicals or acids; UV lights; chipping, sanding or grinding; welding; furnace operations; and, metal and wood working.		
	<b>Check the appropriate box for each hazard:</b>		<b>Description of hazard(s):</b>
	Chemical Exposure	<input type="checkbox"/>	
	High Heat/Cold	<input type="checkbox"/>	
	Dust/Flying Debris	<input type="checkbox"/>	
	Impact	<input type="checkbox"/>	
	US/IR Radiation	<input type="checkbox"/>	
Other:	<input type="checkbox"/>		
	<b>HEAD/NECK/FACE HAZARDS:</b> Tasks that can cause head/neck/face injury include: working below other workers who are using tools or materials that could fall, working on energized electrical equipment or utilities, and working in trenches or confined spaces.		
	<b>Check the appropriate box for each hazard:</b>		<b>Description of hazard(s):</b>
	Chemical Exposure	<input type="checkbox"/>	
	Dust/Flying Debris	<input type="checkbox"/>	
	Impact	<input type="checkbox"/>	
	UV/IR Radiation	<input type="checkbox"/>	
	Electrical Shock	<input type="checkbox"/>	
Other:	<input type="checkbox"/>		
	<b>FOOT HAZARDS:</b> Tasks that can cause foot injury include: exposure to chemicals or acids, welding or cutting, materials handling, renovation or construction, and electrical work.		
	<b>Check the appropriate box for each hazard:</b>		<b>Description of hazard(s):</b>
	Chemical Exposure	<input type="checkbox"/>	
	High Heat/Cold	<input type="checkbox"/>	
	Impact/Compression	<input type="checkbox"/>	
	Electrical	<input type="checkbox"/>	
	Puncture	<input type="checkbox"/>	
	Slippery/Wet Surfaces	<input type="checkbox"/>	
Other:	<input type="checkbox"/>		

	<b>HAND HAZARDS:</b> Hand injury can be caused by: work with chemicals or acids, exposure to cut or abrasion hazards (for example, during demolition, renovation, wood working, or food service preparation), work with very hot or cold objects or materials, and exposure to sharps.		
	<i>Check the appropriate box for each hazard:</i>	<i>Description of hazard(s):</i>	<i>Required PPE:</i>
	Chemical Exposure <input type="checkbox"/>		
	High Heat/Cold <input type="checkbox"/>		
	UV/IR Radiation <input type="checkbox"/>		
	Electrical Shock <input type="checkbox"/>		
	Puncture <input type="checkbox"/>		
	Cuts/Abrasion <input type="checkbox"/>		
Other: <input type="checkbox"/>			
	<b>BODY HAZARDS:</b> Injury of the body (torso, arms, or legs) can occur during: exposure to chemicals, acids, or other hazardous materials; abrasive blasting; welding, cutting, or brazing; chipping, sanding, or grinding; use of chainsaws or similar equipment; and work around electrical arcs.		
	<i>Check the appropriate box for each hazard:</i>	<i>Description of hazard(s):</i>	<i>Required PPE:</i>
	Chemical Exposure <input type="checkbox"/>		
	High Heat/Cold <input type="checkbox"/>		
	Impact/Compression <input type="checkbox"/>		
	Electrical Arc <input type="checkbox"/>		
	Cuts/Abrasion <input type="checkbox"/>		
	Other: <input type="checkbox"/>		
	<b>FALL HAZARDS:</b> Personnel may be exposed to fall hazards when performing work on a surface with an unprotected side or edge that is 4 feet or more above a lower level, or 10 feet or more on scaffolds. Fall protection may also be required when using vehicle man lifts, elevated platforms, tree trimming, or performing work on poles, roofs, or fixed ladders.		
	<i>Check the appropriate box for each hazard:</i>	<i>Description of hazard(s):</i>	<i>Required PPE:</i>
	Fall Hazard <input type="checkbox"/>		
	<b>NOISE HAZARDS:</b> Personnel may be exposed to noise hazards when working in mechanical rooms; machining; grinding; sanding; cage washing; dish washing; working around pneumatic equipment, grounds equipment, generators, chillers, motors, saws, jackhammers, or similar equipment.		
	<i>Check the appropriate box for each hazard:</i>	<i>Description of hazard(s):</i>	<i>Required PPE:</i>
	Noise Hazard <input type="checkbox"/>		
	<b>RESPIRATORY HAZARDS:</b> Personnel may be exposed to respiratory hazards that require the use of respirators: during emergency response; when using certain chemicals outside of a chemical fume hood; when working with animals; when applying paints or chemicals in confined spaces; when welding, cutting, or brazing on certain metals; and when disturbing asbestos, lead, silica, or particulate hazards.		
	<i>Check the appropriate box for each hazard:</i>	<i>Description of hazard(s):</i>	<i>Required PPE:</i>
	Chemical Exposure <input type="checkbox"/>		
	Particulate Exposure <input type="checkbox"/>		
	Other: <input type="checkbox"/>		

I certify that the above hazard assessment was performed to the best of my knowledge and ability, based on the hazards present on this date.  
 Signature: \_\_\_\_\_