

	COMPANY HEALTH AND SAFETY PROGRAM	
	Document No. 8.4	Date: August 17, 2006
	Personal Protective Equipment	Revision: 0

1.0 PURPOSE

The purpose of this procedure is to ensure that personal protective equipment (PPE) is properly utilized to protect HES employees from exposure to hazardous chemicals, physical agents, or other hazards. This procedure also complies with 29 CFR 1910 Subpart I and 1926 Subpart E.

2.0 SCOPE

The requirements discussed in this procedure apply to all HES projects where PPE is used as a measure to control employee exposure to hazardous chemicals or physical agents. All personal protective equipment should be of safe design and construction for the work to be performed.

3.0 PROCEDURE MAINTENANCE

This document will be maintained by the Health & Safety Manager and approved by the Director, Environmental Services with each new revision.

4.0 RESPONSIBILITIES

HES will implement the necessary measures to prevent unauthorized use of personal protective equipment. The proper equipment will be provided to employees along with the appropriate training to use that equipment.

The project manager or supervisor will ensure that the requirements and practices of this procedure are followed or a site-specific health and safety plan is developed and implemented accordingly. They will assess the work area to determine if hazards are present and ensure protection is available prior to the start of work.

The Health & Safety Manager will provide technical input, assist in the selection of personal protective equipment as required, and monitor compliance to this procedure.

Personnel must use PPE in an approved and safe manner. They will be responsible for recognizing and abiding by this procedure. Where personnel provide their own PPE, HES will ensure its adequacy, through the direction of the proper maintenance, and proper sanitation of the equipment.

Failure to comply with this procedure requiring the use or wearing of personal protective equipment in connection with specific tasks, will result in disciplinary action and could lead to termination of employment.

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5.0 PPE SELECTION

PPE should only be used when engineering and/or administrative controls are not feasible to protect personnel from identified hazards. Once PPE has been determined to be necessary, its selection should be based upon the exposure potential (i.e. chemical hazards, physical hazards, other agents, etc.) that corresponds with the site or project involved and the activities being performed. A site-specific HASP is an example of where the activities will be described along with the related hazards and PPE needed to safely protect personnel.

Some *hazards to consider* include, but are not limited to the following:

- Moving, falling, or flying objects
- Toxic atmospheres
- Oxygen deficiency
- Explosive atmospheres
- Work above ground level
- Pinch-points, nip points, rotating machinery
- Contact with energized sources
- Lifting heavy material
- Slippery or unstable walking surfaces
- Heat/ Cold stress
- Biological exposure

Some *PPE controls to consider* include, but are not limited to the following:

Work boots (rubber boots, steel-toe boots)	Fall Protection
Work gloves (leather, rubber, latex)	Respirators
Chemical resistant full-body suits	Fire extinguishers
Safety glasses, goggles, face shield	

6.0 PERSONAL PROTECTIVE EQUIPMENT

- **Eye and face protection**

HES will ensure that affected personnel uses appropriate eye and face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, chemical gases or vapors, or damaging light radiation.

Affected personnel will use eye protection that provides side protection when there is a hazard from flying objects. Detachable side shields are acceptable for use.

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Affected personnel who wear prescription lenses while engaged in operations involving eye hazards will wear eye protection that encompasses the prescription in its design, or eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.

Eye and face PPE will be distinctly marked to facilitate identification of the manufacturer.

Affected personnel will use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation. A listing of appropriate shade numbers for various operations is located in 29 CFR 1910.133.

Protective eye and face devices will comply with ANSI Z87.1-1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection".

- **Respiratory protection**

This type of PPE is covered by the HES Respiratory Protection Program in Section 7.2 of the Company Health and Safety Program.

- **Head protection**

Affected personnel will wear a protective helmet, such as a hard hat, when working in areas where there is a potential for injury to the head from falling objects.

Affected personnel will wear a protective helmet designed to reduce an electrical shock when they are near exposed electrical conductors which could contact the head.

Protective helmets for protection against high voltage electrical shock and burns will meet the specifications contained in Z89.2-1971, "American National Standards Institute".

Protective helmets for protection against impact will comply with ANSI Z89.1-1986, "American National Standards for Personnel Assurance Protection - Protective Headwear for Industrial Workers Requirements".

- **Occupational Foot protection**

Affected personnel will use protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects

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piercing the sole, and where personnel's feet are exposed to electrical hazards. Protective footwear will comply with ANSI Z41-1991, "American National Standard for Personal Protection - Protective Footwear".

Safety-toe footwear for personnel will meet the requirements and specifications in Z41.1-1967, "American National Standard for Men's Safety-Toe Footwear".

- **Hand protection**

Personnel will use appropriate hand protection when their hands are exposed to hazards like those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, electrical burns, and harmful high temperature extremes.

Selection of the appropriate hand protection will be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

- **Hearing protection**

This type of PPE is covered by the HES Hearing Conservation Program in Section 7.3 of the Company Health and Safety Program.

Ear protective devices inserted in the ear will be fitted or determined individually by competent persons. Plain cotton is not an acceptable protective device.

- **Protective clothing**

Personnel will wear protective clothing accordingly. Confined space activities may call for SARANEX chemical protective full-body suits while asbestos abatement activities may call for breathable TYVEK full-body suits for protection against particulates and fibers. These types of clothing will be provided by HES based on the project requirements.

- **Personal work clothing**

The minimum work clothing that is acceptable for HES personnel is long pants, good work shoes or boots, and a shirt that completely covers the shoulders providing protection against hazards such as concrete splash, abrasions to skin, general spills, or slag from welding or cutting.

Caution should be taken in wearing loose or torn clothing, rings, watches, necklaces, and even long hair, any of which may catch in power driven equipment.

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- **Safety harnesses, lifelines, and lanyards**

This type of PPE is covered by the HES Fall Protection Program in Section 8.5 of the Company Health and Safety Program.

6.0 MAINTENANCE, STORAGE, AND REPAIR

PPE should be maintained and stored in accordance with the manufacturer's recommendations. PPE maintenance and repair will be conducted by the Supervisor or the Health & Safety Manager.

7.0 PPE TRAINING AND FITTING

All personnel will be given site-specific PPE training and fit testing by the Project Manager, Supervisor, or Health & Safety Manager prior to the start of work.