

Morenci Safe Production Standard	Standard # 2.16	
Personal Protective Equipment (PPE)	Revision #	07
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	Document Owner	Health and Safety
Approvals:		
<i>[Signature]</i> Senior VP Morenci Operations: 1/30/2020	Safety Steering Committee: 1/30/2020	

1.0 PURPOSE:

This standard requires that special protective equipment and special protective clothing shall be provided, maintained in a sanitary and reliable condition, and used whenever hazards of process or environment, chemical hazards, radiological hazards, or mechanical irritants are encountered in a manner capable of causing injury or impairment.

2.0 SCOPE:

2.1 This standard addresses minimum requirements in identifying, determining and managing the use of Personal Protective Equipment (PPE).

2.2 This standard applies to:

- a) Employees and other individuals (including temporary employees and contractor personnel), company's visitors, or any other person(s) who work and/or are present in the workplace.

3.0 TERMS, DEFINITIONS AND ABBREVIATIONS

Terms, definitions and abbreviations which apply to this standard are:

3.1. Administrative Control – controls that reduce exposure to employees (i.e. employee's exposures by scheduling reduced work time, application of appropriate PPE, etc. in contaminant or hazardous areas). Also included here is employee training that includes hazard recognition and specific work practices that help reduce risk of an injury.

3.2. ANSI – stands for American National Standards Institute; a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

3.3. Engineering Control – control method by engineering out the identified hazard, either by initial design specifications or by applying methods of substitution, isolation, enclosure, or ventilation.

3.4. Eye and Face Protection – Protection equipment to reduce risks arising from flying particles or chemical substances which could cause injuries, e.g. facial burns, or foreign bodies entering the eye, etc.

3.5. Fall Protection Equipment – A support equipment to counteract the effects of a possible fall from above ground level. Safety harness, when used properly, will reduce fall induced injuries.

3.6. Hand and Arm Protection – Protection equipment to protect hands and arms from burns, cuts, abrasions, dermatitis, sensitization (allergies).

3.7. Hazard Identification and Risk Assessment – a process in identifying and evaluating hazards and risks associated with the hazards in the workplaces. These hazards/risks may be associated with machinery, equipment, tools, operations, materials, and the physical plant.

3.10. Hierarchy of Control – The hierarchy of control measure is a tool used to control Safety and Health related risks/impacts in the workplace, where all possible control options are ranked by order of effectiveness. The hierarchy of control is a useful tool, as the order tells you which types of control measure provides a better level of risk control. The higher in the hierarchy of control, the better and more reliable the control is. Preferably use control measures which are presented first, so far as is reasonably practicable.

Ranks of the hierarchy of control are:

- First option – Elimination measures;
- Second option – Substitution measures;
- Third option – Engineering control measures;
- Fourth option – Administrative control measures; and
- Fifth option – Use of appropriate Personal Protective Equipment (PPE).

3.11. NIOSH – stands for the National Institute for Occupational Safety and Health; the US Federal Agency responsible for conducting research and making recommendations for the prevention of work-related injury and ill health.

3.12 Operational Areas – Anywhere in or about the mine where work is being conducted or which is a part of the extraction or production process.

3.12. Protective Clothing – General apparel worn during working activities (usually in exposure to contaminant, corrosive, acid, etc.). It should be comfortable and allow for easy movement and air circulation.

3.13. PPE Matrix – a matrix generated based on the workplace hazard identification and risk assessment to indicate appropriate PPE to be used by workforces for specific task or tasks in the designated area or areas.

3.14. Respiratory Equipment – Equipment designed to give personal protection from exposure to air borne contaminants.

3.15. Safety Footwear – Steel Toe Protective footwear appropriate to hazard exposure risks. Types could include rubber, metatarsal, ankle support, insulated soles, or closed leather shoes. The wearing of soft tops or open sandals shall not be permitted due to the risk of puncture wounds, or chemical spill hazards.

3.16 Specialized PPE – Protective Equipment, other than that required for normal entry onto mining property, that is used to control exposure to unique hazards used or created as a result of the extraction and production process.

4.0 RESPONSIBILITIES:

4.1 Supervisors will ensure that their employees understand and follow this standard, including training on the use and care of PPE applicable to their areas and work duties. Employees will be provided with the P.P.E. necessary to complete all work in compliance with this standard. Supervisor's duties include evaluation of the work to be performed, determination of the means of protection that will be used, and adherence to this standard.

4.2 Employees will follow this standard and notify their supervisor of any situations that do not comply with this standard. Employees will be responsible for learning when PPE is necessary and how to properly inspect and use forms of personal protective equipment.

4.3 Management will provide resources for supervisors and employees to comply with this standard. Resources may include information, training, time, money and PPE.

Implement this standard in area of responsibility. This includes:

- (1) Ensuring that PPE assessments to determine appropriate PPE to be used are carried out, followed up and documented.
- (2) Consulting Safety and Industrial Health Department on the use of specialized personal protective equipments (PPE) before purchasing it.
- (3) Ensuring that PPE Program is in place, the PPE required is made available to all employees and visitors entering his/her area of responsibility.
- (4) Ensuring that users of PPE are trained/fit-tested in the use and care of the PPE.
- (5) Enforcing the wearing, maintenance, storing and proper disposal of PPE in area of responsibility.
- (6) Controlling and documenting issuance of PPE in area of responsibility.
- (7) When required, generating SOPs for the effective use of PPE.
- (8) Reviewing and evaluating the effectiveness of the PPE program (at least through management self-audits).

4.4 Health and Safety Manager will provide OH&S advice for all Morenci Operations Personnel, and Contractor Companies to ensure that they meet their responsibilities and accountabilities relevant to the implementation of this standard.

4.5 Project Managers will ensure that contractors are informed of the standard and that contractors understand the requirement for compliance with the standard, including day to day oversight.

5.0 STANDARDS OF PERFORMANCE

GENERAL REQUIREMENTS

5.1 As the last means of control, correct selection and use of PPE shall be applied to protect employees against safety and health hazards [where other controls have failed or have been less effective], as well as complying with all legal requirements.

5.2 Special protective equipment and special protective clothing shall be provided, maintained in a sanitary and reliable condition and used whenever hazards of process or environment, chemical hazards, radiological hazards, or mechanical irritants are encountered in a manner capable of causing injury or impairment.

5.3 Where a risk assessment or other means of identification indicates the need for PPE, an evaluation shall be conducted to determine the type of PPE that would be required and where its use will be necessary. *See Appendix 8.3 titled PPE Assessment Guidelines.*

- a) Consideration in determining the need to use PPE must be based on the hierarchy of control in which PPE is the last resort in protecting employees from risk exposures.
- b) PPE recommended to be used shall be appropriate to the risk(s).
- c) When required, consultative process with the health and safety department on use of specialized PPE, shall be carried out.
- d) Matrix of approved PPE to be used shall be developed, communicated to employees and relevant parties, and updated. Use of the divisional HIRA matrices can be used as means of documenting the risks and PPE control measures specific to the area. *See Appendix 8.2 titled An Example of PPE Matrix* for an optional documentation method.

5.4 As a result of the PPE assessment, appropriate PPE shall be purchased, stocked in adequate supplies and made accessible for users.

- a) Specialized PPE shall be issued at no cost to employees at intervals specified by the manager of each division. Employees are responsible for purchasing steel toe boots, and prescription safety eyewear as specified in the Morenci prescription safety glasses replacement standard.
- b) Control of PPE issuance shall be regulated as deemed necessary by division management.
- c) Selection, purchasing, including purchasing/obtaining for testing purpose, and stocking levels of new PPE not currently used on site shall be based on an initial review and approved through use of Morenci's management of change process.
- d) Prior to the purchasing and stocking of new PPE, these products shall be evaluated and successfully tested for use at Morenci operation.

5.5 Where visitors and contractors working within Morenci Operational areas provide their own PPE, this PPE must comply with MSHA requirements and the intent of this standard.

5.6 Task Training on the use, maintenance, storage, replacement and disposal of PPE shall be in place.

- a) Users of PPE shall be informed on the correct use of each PPE according to the task being conducted, manufacturer's specifications and the health and safety consequences of wearing PPE incorrectly.
- b) Users of PPE shall be informed on the need for pre-use and post-use inspections that must be carried out and any periodic checks as required by the manufacturers of specific types of PPE.
- c) Users of PPE shall be trained on how to store, handle, decontaminate and disposed of contaminated PPE.
- d) Users of PPE shall be informed on the need for fit-testing when required.
 - i. Personal Fall Arrest Equipment (Full Body Harnesses)
 - ii. Respiratory Protection
 - iii. Any other form of specialized PPE if required by the manufacturer

- e) Users of PPE shall be trained on any new type of PPE introduced that is significantly different than current PPE in use.
- f) Training documents and records shall be maintained for reference and potential audits.

5.7 Whenever PPE is required to be worn, appropriate and adequate signage shall be posted in conspicuous locations to remind users of their obligation to wear it.

5.8 PPE shall be correctly worn as specified by the original equipment manufacturers requirements and internal Standard Operating Procedures (SOP).

5.9 PPE shall be maintained in a clean and good state of repair, and must be replaced once it is no longer serviceable and/or defects which affect safety are identified.

- a) Pre and post-use checks shall be carried out by users to ensure each PPE is in a serviceable condition at all times.
- b) Periodic inspections on critical PPE such as harnesses, SCBA, shall be carried out by an assigned competent person, and the inspected PPE must be documented.

5.10 Pre-employment and periodic medical check-ups shall include an evaluation to determine if employees are medically fit to wear a respirator and communicate such information to appropriate parties as required. *Refer to Morenci Operations Occupational Health Procedure.*

5.11 Unserviceable or damaged PPE shall be immediately removed from work locations and disposed of. Specialized PPE in which manufacturer specifications allow for refurbishment or repair of PPE components (i.e. certain self-retracting lifelines) may be retained and sent for repairs. Until the PPE is shipped an out of service tag shall be affixed to the PPE in a readily identifiable location with the specific damage or defect listed on the tag.

5.12 When employees must store their PPE at work location, appropriate PPE storage shall be designated and maintained.

5.13 Any functional modification to PPE is prohibited.

6.0 REFERENCE DOCUMENTS

6.1 Management Procedure 4.3.1 – Hazard Identification Risk Assessment

6.2 Management Procedure 4.4.6.4 – Occupational Health Procedure

6.3 Mine Safety and Health Administration (MSHA), Subpart N Personal Protection

6.4 Occupational Safety and Health Administration (OSHA), 3151-12R 2003 on personal protective equipment.

7.0 RECORDS

Name of the Document	Responsible for Control	Records Retention
Original Document of this Standard	Health and Safety	Permanent
Risk Assessments (PPE Assessment Guidelines, HIRA Matrices)	Division / Area	Permanent
Training Certificates	Division / Area or Training Department	Duration of employment + 10 years
Approved PPE Exemption Requests	Division / Area or Employee	For Area Exemption – 10 Years For Employee Exemption – kept with employee at all times while exemption is active

8.0 APPENDICES

8.1 GUIDELINES FOR THE SELECTION AND USE OF PPE

8.2 PPE MATRIX (Optional use, the HIRA Matrix may be used as a risk management tool)

8.3 PPE ASSESSMENT GUIDELINES

8.4 Snapshot of HS-SPS-2.16-001 - PPE EXEMPTION REQUEST

9.0 REVIEW AND CHANGE

All changes, modifications and/or revisions must be documented on the table below:

Description of Changes to this Document
<i>Included reflective vest requirements within Appendix 8.1 and modified appendix 8.4 – based on employee feedback (B.L. 5/29/2012)</i>
<i>Updated Revision Date & # according to the changes described above along with those described in this line item. Changed name of 8.4 from "Hard Hat Exemption Request" to "PPE Exemption Request" in accordance with the actual title of the form. (S.E. 06/18/2012)</i>
<i>Updated compressed air requirements regarding PPE (B.L. 8/15/2012)</i>
<i>Included form number for Appendix 8.4 (S.Elias 08/20/2012)</i>
<i>Updated records table – S. Elias 06/24/2013 Rev. 05</i>
<i>Corrected Appendix references throughout document – S. Elias 11/22/2013 Rev. 06</i>
<i>Removed hardhat in vehicle requirement 1/30/20</i>

GUIDELINES FOR THE SELECTION AND USE OF PPE – Appendix 8.1

1. PPE Assessment and Matrix

- a. An assessment shall be carried out to determine what type of PPE is required to be used for specific task(s) and/or work location(s). *Refer to Attachment 8.1 titled Guidelines for the selection and use of PPE*
- b. This assessment shall be used as the basis for the development of a PPE matrix showing what types of PPE are to be worn. *Refer to Attachment 8.2 titled An Example of PPE Matrix.*
- c. All PPE shall comply with this standard, and national and/or international OH&S legislations.
- d. Relevant documents and records of PPE assessment, including selection of appropriate PPE to purchase and stock, shall be maintained and updated.

2. Issuance of PPE

- a. An adequate supply of PPE shall be made available at all times.
 - i. The general warehouse is the only approved locations within Morenci to purchase and stock approved PPE for use on Morenci property.
 - ii. All Specialized PPE shall be issued at no cost to employees at intervals specified by the manager of each division.
 - iii. In certain cases, such as issuance of respiratory protection, a medical review and fit test shall be conducted by relevant experts such as a medical doctor prior to use.
- b. Issuance of PPE shall be recorded and appropriately controlled.

3. Fitting and Instructions

- a. Fitting and instructions in the use of PPE shall be included in the initial training (SHE Induction training) for new employees and visitors.
 - i. In a case where newly introduced PPE will be used, appropriate session(s) shall be organized to meet the employees' training requirement.
 - ii. At minimum, the following instructions shall be part of the PPE training/awareness program:
 - When PPE is to be used;
 - What type of PPE is to be used;
 - How to properly put on, take off, adjust and wear the PPE;
 - The limitations of PPE;
 - Proper care, pre and post-use checks, maintenance, and disposal of PPE.
 - iii. Employees shall also attend OH&S Annual Refresher Programs where review of the use, maintenance and proper disposal of PPE is discussed.
- b) Where a respiratory hazard exists, division management shall ensure that appropriate type of respirator is made available for use.
- c) The type of respiratory protection to be used shall be determined by Division Management in consultation with the Safety and Health Department.
 - i. All respiratory protection used other than body-worn self-contained self rescuers shall comply with NIOSH standards.
- d) For the PPE as listed below, it will be the responsibility of Business Unit Head to ensure employees are trained in the use, maintenance and proper disposal of such equipment on the job:
 - (1) Any respiratory protection equipment
 - (2) Self-contained self-rescuers

- (3) Hoods and Breathing Apparatus (BA) sets
- (4) Any Hearing Protection Devices (HPD's)
- (5) Full body harnesses
- (6) Disposable overalls and chemical suits.

4. Misusing and Abusing of PPE

- a) PPE shall be used for what it is intended, correctly worn, maintained, stored when not in use and properly disposed of. Misusing and abusing PPE is strictly prohibited.
 - i. No home-made PPE shall be used at Morenci.
 - ii. No PPE will be modified or altered in any way, unless it is authorized and carried out by approved party/parties. Division Management requiring PPE modification shall follow Morenci Management of Change Guidelines. The Safety and Industrial Health Department shall, in turn, consult relevant manufacturer and applied regulations in determining whether the proposed modification is agreed or not.
- b) No PPE will be intentionally damaged, painted or permanently marked (where application of permanent markings will affect the integrity of the PPE). Damaging of PPE items might reduce the effectiveness of the items, thereby endangering the safety and health of the person wearing the item
- c) No unauthorized stickers that will impair the effectiveness of PPE will be placed on the Hard Hat.
- d) Defacing Company property shall be treated as a serious offence and will result in corrective action being taken against the offender.

5. Types of PPE to Wear

- a) Head Protection
 - i. The intent of wearing head protection is to protect the head (including the brain) against impact and penetration in working environments.
 - ii. Hard hat for head protection shall meet the ANSI Z89.1-2003.
 - iii. Employees shall wear head protection if any of the following apply:
 - In all operational and maintenance areas
 - In areas containing fall of material hazards
 - In areas containing low overhead clearances that could induce an injury as a result of striking, bumping or otherwise contact the head
 - There is a possibility of inadvertent head contact with electrical hazards
 - iv. Special areas and or equipment in which the use of head protection could negatively affect operational processes or create a greater hazard by their use shall be evaluated and the hierarchy of controls used to effectively manage associated risks. Where possible the configuration and layout of these areas/equipment should reduce the likelihood of head injuries through redesign, padding, guarding and the use of warning systems. A hard hat exemption request must be completed for each area or equipment meeting this deviation – *See Appendix 8.4 PPE Exemption Request Form.*
 - v. Hard hats shall have a hard outer shell and a shock-absorbing/energy attenuating lining that incorporates a headband and straps that suspend the shell away from the head.

- b) Eye and Face Protection

- i. The wearing of eye and face protection is required for all employees working in or travelling through an area demarcated or designated as a compulsory eye or face protection zone and shall be worn for the entire period spent in that area.
 - ii. Prescription safety eye glasses with side-shields shall be the only prescription eye protection allowed in workplace. (Contact lenses do not qualify as eye protection)
 - iii. Safety eye glasses shall have clear or indoor/outdoor lenses when worn indoors or in low light situations.
 - iv. Certain tasks and activities, e.g. welding, flame-cutting, metal to metal contact, furnace tapping, use of compressed air etc. require additional or specialized eye protection.
 - v. Whenever compressed air is used to clean or purge equipment face shields or similar protection shall be used.
 - vi. Chemical goggles and face shield may be required when handling or working with hazardous chemicals. The PPE Matrix shall indicate type of chemical goggle to be used.
 - vii. Where hazardous chemicals are used in large quantities eyewash and/or safety shower shall be readily available at all times.
 - viii. Eye and Face Protection shall meet the ANSI Z87.1-2007.
- c) Safety Footwear
- i. The need for and type of protective footwear shall meet the risks for the area and only certified safety footwear complying with Morenci standards shall be worn.
 - ii. Appropriate protective footwear shall be worn at all times in plants, workshops, construction areas, milling operations, mining areas and other areas as designated. ***At a minimum steel toe boots (or equivalent protection i.e. hard toe boots) shall be worn at all time while working on Morenci Property.***
 - iii. Where required, due to routine manual material handling, additional protection for the bridge of the foot (meta-guard) shall be worn.
 - iv. Safety footwear shall meet the ANSI Z41.1-1991.
 - v. When employees are assigned tasks which normally require them to climb ladders or when climbing ladders may be needed based on non-routine or emergency situations; safety footwear worn by such employees shall have a raised or defined heel.
- d) Protective Clothing
- i. Reflective vests must be worn by all personnel when working or traveling within 15ft of active roadways.
 - When worn all reflective vests/clothing shall meet, at minimum, ANSI type 2 specifications for retro reflectivity.
 - Different reflectivity requirements (More or Less Stringent) may be needed based on the type of work and exposure to mobile equipment contact risks. When differences are needed the change shall be evaluated by FMMO safety and management representatives and documented following FMMO risk management guidelines.
 - ii. Chemical / Acid Suits
Employees who perform the following tasks shall wear a chemical resistant suit with a full face shield for the duration of the task to be performed.
 - Pumping of bulk hazardous chemical substances (caustic soda, sulphuric acid, formalin, ammonia, etc.).

- Employees performing maintenance on pipelines and equipment which convey bulk hazardous chemical substances.
 - PPE is not required when pipelines, equipment and areas can be accessed and the necessary tasks conducted in a safe manner due to the presence of other controls such as guarding, protective coatings, diapers, etc...
- iii. Life Jackets
- The following shall apply:
- No person shall enter or work in an area that contains water where there is a risk of drowning without a life jacket.
 - The buddy system shall be used when personnel enter or work in an area that contains water where there is a risk of drowning.
 - Life jackets shall be worn correctly when working around water.
- iv. Cold Temperature Clothing
- Cold temperature clothing shall only be issued to employees working in areas that warrant the wearing of these items. Cold temperature clothing shall be issued once approved by division management.
- e) Respiratory Equipment
- i. Types of respiratory protection shall be determined as per risks (air contaminants present).
 - ii. Employees shall be fit tested prior to using the respirator for the first time.
 - iii. Respirators shall be worn in designated areas and whenever hazardous substances cannot be effectively controlled to an acceptable level.
 - iv. Non-disposable respirators shall be cleaned after each use and shall be placed in a plastic bag and stored in a clean and dry place.
 - v. Respirators shall be worn with the head straps securely attached around the users head underneath the hard hat.
- f) Hearing Protection
- i. Noise Zoning - All exits and entrances to "noisy" areas (TWA of 85 dB(A) or greater) shall be adequately marked with appropriate signs. No person may enter a zoned area without an approved hearing protection device (HPD).
 - ii. Stationary equipment that emits noise levels of 85 dB(A) or greater shall be adequately marked with appropriate symbolic signs. No person may operate such equipment without an approved hearing protection device (HPD). If area demarcation effectively informs employees of the need to utilize hearing protection additional signage may be deemed unnecessary.
 - iii. All vehicles where noise levels inside the operator cabin is found to be above 85 dB(A), shall wear hearing protection devices.
 - iv. Division management may consider issuing employees who are exposed to noise levels in excess of 105 dB(A) with a combination of HPDs, e.g. ear plugs together with ear muffs.
- g) Personal Fall Protective Equipment (Full Body Harnesses)
- i. Whenever a risk of injury from falling cannot be eliminated, personal fall protective equipment in the form of full-body harness shall be worn and 100% tie-off shall be applied.
 - ii. The lanyard /energy absorber shall be fastened to the full-body harness and secured to substantial objects, and if possible, these objects should be overhead. At no time

should the lanyard be fastened below the person's shoulder unless a competent person has determined that fall forces can be kept to below 1800lbs, free fall distances limited to below 6ft and swing fall hazards are effectively controlled .

- iii. Personal fall protective equipment and its lanyards shall be inspected prior to each use for wear, damage or other deterioration.
 - iv. Horizontal lifelines shall be designed, installed and used under the supervision of a qualified person and maintain a minimum of 5000lbs static load per person. Lifelines shall be protected against being cut or abraded.
 - v. Ropes and straps (webbing) used in lanyards, lifelines and strength components of body harness and belts shall be made of synthetic fibers.
 - vi. Circumstances requiring the use of fall protection and lanyards, include but are not limited to, the following:
 - elevated platforms and any other type of suspended scaffolding.
 - on scaffolds with incomplete decking or incomplete guardrail
 - on rooftops
 - within 7 feet of the edge of floors or roofs where there are no guardrails or wire rope railing
 - when removing floor planks, hole covers, grating and other forms of safe work platform modifications
 - in any elevated location 4ft in height or more where there is no other fall protection
 - in areas exposed to protruding, unprotected, reinforced steel at any height
 - when exposed to a hazard of falling into dangerous equipment, water stream, hazardous chemical, etc., at any height.
 - when a hazard of any type exists at any elevation that is reasonably likely to result in a serious injury.
 - vii. Any fall protective equipment, including lifelines and lanyards, subjected to "service loading" shall be removed from service and discarded.
 - viii. For more information specific to fall protection refer to Morenci Fall Protection Policy
- h) Hand and Arm Protection
- i. A Survey shall be carried out of the work to be performed in consultation with employees to determine the type of hand protection required for each task. Note: Potential hazards include skin absorption of harmful substances, chemical or thermal burns, electrical dangers, bruises, abrasions, cuts, punctures, fractures and amputations.
 - ii. Once this survey is completed, the type of hand protection to be used shall be included in the PPE matrix or the HIRA Team Matrix
 - iii. Gloves selection is based upon the tasks to be performed and the performance and construction characteristics of the glove material. For protection against chemicals, glove selection shall be based on the chemicals encountered, the chemical resistance and the physical properties of the glove material.
 - iv. *For protection of the Hand, Arm, Body and Face when metal to metal contact occurs or is suspected refer to Morenci Hand Tools Standard*
- i) Disposal of PPE
- i. PPE shall be replaced on an exchange basis and exchanged items must be retained and marked to identify the item is to be discarded.
 - ii. The discarded PPE shall:

- be treated as hazardous waste as per the Morenci Environmental Waste Management Program when the items are contaminated (items such as disposable coveralls, chemical suits, chemical cartridge respirators; or be destroyed through tearing/cutting and discarded as domestic waste (overalls, socks, etc.).

PPE MATRIX – Appendix 8.2

Note:

1. Consult Area and/or PTFI Industrial Hygiene in developing PPE Matrix for consistency company-wide.
2. This matrix must be updated when there is any change in PPE applications or as a result of re-surveys.

Company :
Division :
Department :
Section (if required) :

Generated on:

Date:.....

Updated on:.....

NO	AREA/LOCATION/ OPERATION or TASK	ASSOCIATED HAZARDS	RECOMMENDED PPE
1	Airborne dust; flying particles; hazardous liquid chemicals splash; extreme heat; falling objects; exposed electrical wiring/components; object roll, fall onto, or strike employees' feet; explosive atmosphere; contact with tools or material that might scrape, bruise, or cut; handle chemical that might irritate skin, or come into contact with blood; bodies exposed to sharp or rough surfaces, extreme heat, or acid or other hazardous substance; exposed to loud noise; etc.	Hard Hat Safety glasses (clear or dark); Prescription safety glasses with side shield Safety Shoes - leather or rubber boots (with toe cap/steel mid sole/metatarsal/electrical resistant) Reflective safety Vest
2
3			
4			
5			
6			

PPE ASSESSMENT GUIDELINES - Appendix 8.3

Refer to Morenci Management Procedure 4.3.1 – Hazard Identification Risk Assessment for the methodology of conducting hazard identification and risk assessment.

In order to assess the need for PPE, the following steps should be taken:

1. Survey: Conduct a walk-through survey of the area/facility/task in question to identify sources of hazards.

Categories for Consideration:

- a. Impact
- b. Penetration
- c. Compression (roll-over)
- d. Chemical
- e. Heat
- f. Harmful dust
- g. Light (optical) radiation
- h. Drowning
- i. Falling

2. Sources: During the walk-through survey, observe for the following:

- a) Sources of motion; for example, machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects.
- b) Sources of high temperatures that could result in burns, eye injury or ignition of protective equipment.
- c) Types of chemical exposures.
- d) Sources of harmful dust.
- e) Sources of light radiation, for instance, welding, brazing, cutting, heat treating, furnaces, and high intensity lights.
- f) Sources of falling objects or potential for dropping objects.
- g) Sources of sharp objects which might pierce or cut the hands.
- h) Sources of rolling or pinching objects which could crush the body part (such as foot).
- i) Layout of work place/facility and location of co-workers.
- j) Any electrical hazards.
- k) Review injury/accident data to help identify problem areas.

3. Compile data: Following the walk-through survey, it is necessary to compile the data and other information obtained. That material provides the basis for the PPE assessment that enables the area owner to select the appropriate PPE.

4. Analyze data: Having compiled data regarding a particular occupation, area owner needs to determine appropriate PPE to use.

Snapshot of HS-SPS-2.16-001 - PPE Exemption Request Form

STANDARD PPE EXEMPTION REQUEST

Employee Name (Requestor) _____ Employee I.D. # _____
 Title (Requestor) _____ Division _____ Date: _____

The Exemption is related to the following:

Type of Exemption:	1. Area Based	2. Equipment Based	3. Other
Type of PPE:	Head Protection	Safety Footwear	Eye and Face Protection
	Protective Clothing	Other:	

Reason for the Exemption: _____

Scope of the Exemption: _____

Complete the remainder of the form under the applicable section (for multiple similar requests only one form needs to be completed as long as the scope of the request is clearly defined)

1. Area Related to the Exemption _____
 The Area must be evaluated for hazards:

Low Clearances	Electrical Hazards (contact with)
Mobile Equipment Risks	Fall of Materials
Pinch Points	Illumination
Configuration/Layout/Exits	Other related to the type of PPE

What existing or additional controls will be used to prevent injury: _____

2. Equipment Number: _____ **Equipment Manufacturer:** _____ **Model:** _____
Additional Equipment Numbers: _____
 Amount of head clearance between the occupant(s) and the top of the interior cab with a hard hat on? _____

3. Other: Area or Task Related to the Exemption _____
Personnel or Workgroup affected by the Exemption _____
 What hazards exist or could be created that could reasonably be expected to result in an injury? _____

APPROVAL (Must be completed and received prior to deviating from established PPE usage)				
Health & Safety Rep	Name:	Signature:	Approved	Denied
Division Manager	Name:	Signature:		

You must keep this exemption with you at all times while operating mobile equipment. For other types of PPE exemption requests a copy shall be retained by the division and the original sent to the PMMAO safety Department.

Revision Date 3/29/2012 Intranet posted document is controlled copy. Verify printed version is current prior to use.