

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
MSST Anchorage AK 91111

1980 Anchorage Port Road
Anchorage, AK 99501
Phone: (907) 271-8100
Fax: (907) 271-8140

MSSTANCHINST 6260.17

MSST-ANCHORAGE INSTRUCTION 6260.17

Subj: PERSONNEL PROTECTIVE EQUIPMENT PROGRAM

Ref: (a) Safety and Environmental Health Manual, COMDTINST M5100.47
(b) ~~Personnel Protective Equipment Standard, 29 CFR 1910 Subpart I~~

1. **Purpose.** References (a) and (b) require the Coast Guard to identify appropriate PPE, require its use for all evolutions when PPE may be necessary, and ensure it is used and maintained in a sanitary and reliable condition. Protective equipment includes personal protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices, and protective shields and barriers. This instruction addresses the typical PPE requirements found at MSST Anchorage AK.

The need for and appropriateness of PPE is determined by the hazards of process or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact.

2. **Discussion.** References (a) and (b) require the unit to identify work areas and jobs where personnel are subject to adverse environments, which affect health and safety. **Where adverse effects to employee/member safety or health cannot be corrected by engineering controls or administrative action,** the unit must evaluate the hazards, define the appropriate PPE for each exposure, certify that the PPE required is appropriate, and provide appropriate PPE to employees/members for use in these areas.

3. **Policy**

- a. The Coast Guard must furnish its employees/members, both military and civilian, with the appropriate PPE for the assigned task. PPE, including prescription eyewear is purchased using the unit's AFC 30 funds and accounted for following the guidelines found in COMDTINST M4400.19.

NOTE: The eye exam for military personnel should be conducted by the servicing health care provider, and should not be purchased with the Unit's AFC 30 funds. Eye exams for civilians maybe purchased using AFC 30 funds.

- b. Chapter 4.D of the Uniform Regulations Manual, COMDTINST M1020.6 (series) addresses safety clothing purchases. Generally, the unit must identify and document that the particular piece of PPE is required.

- c. Enclosure (1) provides guidance on PPE selection and use.
- d. Unit furnished PPE shall be maintained at no cost to the employee/member.
- e. Failure by an employee/member to use unit-furnished PPE when required shall be grounds for disciplinary action.

4. **Responsibilities**

a. **The Command shall:**

- (1) Appoint a unit member that is familiar with operations requiring PPE to certify the unit's PPE evaluations and certification (Enclosure (2) and subsequent changes).
- (2) Verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment, and identifies the document as a certification of hazard assessment and prescribes the appropriate PPE. Enclosure (2) is the current certified hazard assessment. ISC Kodiak and/or MLC PAC (kse) can assist in identifying the need for PPE, assist in determining the adequacy of PPE, and provide other assistance as requested.

Note: 29 CFR 1910 Subpart I Appendix B contains an example of procedures that would comply with the requirement for a hazard assessment. This can be found at <http://www.osha.gov/index.html> on the Laws and Regulations page, under OSHA regulations (standards - 29 CFR).

b. **Supervisors shall:**

- (1) Assess their workplace 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 supervisor shall:
 - (a) Prepare instructions, which identify functions, work places, and jobs (including jobs and work places of non-appropriated fund activities) requiring the use of PPE. Enclosure (1) provides guidance on PPE selection and use. (ISC Kodiak and/or MLC PAC (kse) can assist in identifying the need for PPE, assist in determining the adequacy of PPE, and provide other assistance as requested.)
 - (b) Provide the PPE certifying official with updated information for enclosure (2) to include work area, equipment/job, hazard, and PPE required. Enclosure (2) is a document that must be updated continually. It is the supervisor's responsibility to be diligent in regards to including new equipment/work processes in the Hazard Assessment Matrix.
 - (c) Select, furnish, maintain and have affected personnel use, the types of PPE that will protect the affected personnel from the hazards identified in the hazard assessment;

Note: Many types of PPE require regular cleaning and sanitizing, (e.g., respirators and noise muffs).

- (d) Communicate selection decisions to all affected personnel.
- (e) Select PPE that properly fits each affected person.
- (f) Ensure that all personnel understand these requirements and are trained in the proper use and care of all assigned PPE.
- (g) Enforce use of required PPE.
- (h) Reflect requirements for PPE on Unit Allowance Lists.

~~c. Employees/CG Members shall use PPE as required, exercise due care in use and handling of PPE, and report damaged or otherwise unserviceable PPE to their supervisor for repair or replacement~~

- 5. **Process Substitution and Redesign.** In every instance where protective clothing or equipment is essential to the safety and health of a Coast Guard member, there is a hazardous condition that may lend itself to correction by redesign or substitution. Hazardous noises, fumes and particulate matter, for instance, can be eliminated by proper design, redesign or isolation of equipment or processes. Hazardous conditions for eyes may be abated through guarding or process substitution. Therefore, every effort will be made to abate hazardous conditions through isolation, substitution, design, or redesign rather than placing total reliance on personal protective equipment.
- 6. **ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.** Environmental considerations were examined in the development of this Instruction and have been determined to be not applicable.


S. J. BOSAU
Commanding Officer

Encl: (1) PPE Guidelines
(2) Hazard Assessment for PPE use at MSST Anchorage

PPE Guidelines

1. Eye & Face Protection

- a. Eye and face protection is often specified incorrectly. Refer to American National Standards Institute (ANSI) Standard Z87.1-2003 for correct use. Where eye and face protection is required for workers, visitors in the area must use PPE that provides equivalent protection.
- b. Coast Guard requires eye protection to meet American National Standards Institute (ANSI) Standard Z87.1-2003. On the MLC PAC (kse) cgweb site (<http://cgweb.mlcpcac.uscg.mil/mlcpackse/>), at the Personal Protective Equipment link there is a chart from ANSI that can be used to assist in the selection of eye and face PPE (<http://cgweb.mlcpcac.uscg.mil/mlcpackse/Documents/EyeFaceProtectionChart.pdf>).

(1) Eye protection must meet the following minimum requirements:

- (a) Provide adequate protection against particular hazard.
- (b) Be reasonably comfortable.
- (c) Fit snugly without interfering with wearer's movements or vision. Proper fit is crucial because poor fitting protection provides little, if any, protection.
- (d) Be durable.
- (e) Be capable of being disinfected.
- (f) Be easily cleaned, kept clean, and in good repair.

c. Corrective Eye Wear

- (1) There are several options for workers who wear corrective lenses and must use eye protection:
 - (a) Protective lenses with correction ground into the lenses.
 - (b) Goggles worn over the corrective glasses. The goggles must not disturb the adjustment of the corrective lenses.
 - (c) Corrective lenses mounted behind protective goggle lenses.
- (2) Users should understand the limitations or precautions listed by the manufacturer.
- (3) Prescription safety spectacles meeting ANSI Standard Z87.1-2003 for industrial wear shall be provided at Coast Guard expense to personnel working in an eye-hazard environment (e.g., welders, machinists, mechanics, riggers and grinders) as follows:

- (a) Use the current prescription, if adequate.
 - (b) If the employee's current prescription is inadequate, a new refraction and prescription shall be furnished at Coast Guard expense.
 - (c) Nonconductive and nonflammable spectacles shall be issued to personnel who work around electrical circuits or with flammable or explosive substances.
 - (d) Personnel who have been furnished prescription safety spectacles may be required to wear additional appropriate eye protection when actually engaged in increased eye-hazard procedures such as welding, cutting, grinding, chipping, or refurbishing batteries.
 - (e) Personnel not required to wear safety spectacles as a part of normal duties shall wear appropriate eye protection when entering an eye-hazard environment or when engaged in eye-hazard procedures. The employer shall make appropriate temporary issue safety spectacles or goggles available.
- d. Identified eye-hazard work places shall have posted at each entrance conspicuous signs marked as follows:

EYE-HAZARD AREA
Wearing of Eye Protection Required

e. Eye Wash Stations

- (1) In addition to adequate eye and face protection, OSHA requires eye wash stations in all potentially eye-hazardous work areas.
- (2) Emergency eye wash stations must be located within 10-feet, straight line travel, of a highly corrosive eye hazard (e.g., batteries). Less hazardous materials permit travel up to 25 feet. Workers must be able to access the eyewash within ten seconds. The emergency eyewash must deliver 0.4 gallons per minute for 15 minutes according to American National Standards Institute (ANSI) Standard Z358.1-1998.
- (3) Fixed eyewashes must be flushed weekly and inspected monthly. Portable eyewash stations must be maintained according to the manufacturer's instructions and inspected monthly.

2. **Head Protection**

- a. Required protection varies with this hazard.
- b. Head protection must be labeled that it complies with American National Standards Institute (ANSI) Standard Z89.1-1997. Hard hats are classified as:
 - (1) Class A: General service. Protects against impact hazards with limited voltage protection. Typical users are workers in mining, construction, shipbuilding, tunnel, lumber, and manufacturing industries. This type is most often used in Coast Guard operations.

- (2) Class B: Utility service, high voltage helmets. This class of helmet protects the head from impact and penetration, as well as from high-voltage shock and burn. High voltage electrical workers use these helmets extensively. Most Coast Guard personnel will not use class B helmets.
- (3) Class C: Special service helmets. Provide lightweight comfort and impact protection. Typically made from aluminum, Class C helmets offer no protection from electrical shock or corrosion. Typical Class C helmet users include construction, manufacturing, oil field, refinery, and chemical plant workers.

3. Foot Protection

- a. Military issue safety toe shoes will be issued to active duty Coast Guard personnel in accordance with Unit Allowance Lists.
- b. Military issue safety toe shoes or commercially procured shoes meeting American National Standards Institute (ANSI) Standard Z41 Class 75, shall be furnished to civilian employees when:
 - (1) The employee is exposed to operations hazardous to feet at least 30% of the time; or,
 - (2) The employee's occupation is considered to be hazardous to feet, e.g., welders, machinists, mechanics, and material handlers.
 - (3) The employee's position or job description identifies the position/job as requiring foot protection.

NOTE 1. Employees who are exposed less than 30% of the time and temporary employees shall be furnished appropriate foot guards for wear during periods of exposure. If this is infeasible, employees shall be furnished with safety shoes.

NOTE 2. Special purpose safety shoes (e.g., steel handlers, welders, and high voltage electricians) are authorized, as appropriate.

4. Respiratory Protection.

- a. Respiratory protection shall be IAW Technical Guide: Practices for Respiratory Protection COMDTINST 6260.2(series) and Respiratory Protection Program MSSTINST 6260.##.

5. Hearing Protection

- a. Single hearing protection will be furnished whenever personnel exposed to noise greater than 84 dBA. Double hearing protection is required for noise greater than 104 dBA.
- b. Contact ISC (ks) or MLCPAC (kse) if a survey must be completed.

6. Torso Protection

- a. Many hazards can threaten the torso: temperature extremes, hot metal or liquid splashes, impacts, cuts, abrasions, acids, and radiation. A variety of protective clothing can protect the torso: vests, jackets, aprons, coveralls, and full-body suits. Torso protectors are made from a variety of materials ranging from wool and specially treated cotton to leather and rubber.
- b. PPE must be constructed from materials specifically designed to protect against exposure to the particular hazard. This is especially important when chemicals and acids are involved, since these compounds can quickly corrode certain materials. Refer to the manufacturer's guidelines when selecting protective materials for these situations. Always inspect protective clothing before each use for proper fit, maintenance, and function.

7. Hand Protection

- a. Hand protection includes gloves, hand pads, sleeves, and wristlets, but gloves are the most common form of hand protection. Consider dexterity, exposure duration and frequency, and durability requirements when choosing hand protection.
- b. There are five basic categories of gloves typically used in the Coast Guard: chemical resistant, general-purpose, electrical, medical and special purpose. Gloves are further differentiated within each category by the materials they contain: latex, nitrile, butyl, neoprene, polyvinyl chloride, polyvinyl alcohol, etc.
- c. To choose the correct glove, ask some basic questions:
 - (1) To what hazards will the wearer be exposed? What is the degradation level/permeation rate of the glove?
 - (2) What tasks will the user be performing?
 - (3) Is a special grip required?
 - (4) Is good dexterity important?
 - (5) Is arm protection required? Will the arm be exposed to splashing or immersion? If so, how much of the arm should be protected?
 - (6) Does the glove size ensure optimum wear as well as employee satisfaction and productivity?
 - (7) Could the glove itself create a hazard (dermatitis caused by unlined or untreated gloves)?
 - (8) Refer to MSDS for the chemical hazards and required PPE.

8. Electrical Protective Devices

- a. Rubber insulating blankets, matting, covers, line hose, gloves, and sleeves to protect against: accidental shock, electrocution, burns or other electrical injuries. Maintain electrical protective equipment in safe, reliable condition. Electrical protective equipment shall be subjected to periodic inspections and testing IAW 29 CFR 1910.137 (Which can be found at <http://www.osha.gov/index.html> on the Laws and Regulations page, under OSHA regulations (standards - 29 CFR).)

9. Other PPE

- a. Other PPE shall be furnished as required by the job, process, or work environment. The following rationale should be applied when making a determination whether to furnish a particular item of clothing or equipment:
 - (1) The employee's safety and health may be protected by the wear or use of the item of clothing or equipment;
 - (2) It is not reasonable to expect a person to own such clothing or equipment; and
 - (3) It is not reasonable to expect a person to expend personally-owned clothing or equipment in government service.

10. Personal Wear Items

- a. Items of personal wear that are recovered after use will be inspected, cleaned, and sanitized before being reissued. Safety toe shoes, ear plugs, and prescription eyeglasses are not recoverable once issued.

The table below is customized for unit, hazard, and work area, and identifies all potential hazards and required PPE. Listed hazards and PPE may not be appropriate for similar shops, areas, or work processes at MSST Anchorage. Note that for most hazards, safety glasses, goggles, or face shield alone do not provide adequate protection. A face shield is never permitted as the only eye protection. A guide for selecting proper PPE is provided on the web site below. Charts for selecting protective eyewear are included in the OSHA booklet: Assessing the Need for Personal Protective Equipment: A Guide for Small Business Employers. Available at <http://www.osha.gov/Publications/osh3151.pdf>. These Charts must be printed out as an enclosure to the unit instruction and used for selecting eyewear. OSHA also has a new eTools on their web site to assist in evaluations (<http://www.osha.gov/dts/osta/oshsoft/index.html>).

If unit personnel have any questions or concerns please contact MLCPAC (kse) ISC Kodiak: <http://cgweb.mlcpac.uscg.mil/mlcpackse/KSEPersonnel.htm>

HAZARD ASSESSMENT FOR PPE USE AT MSST ANCHORAGE

Shop, Area, or Work Process	Machine or Equipment	Hazard	PPE Required
Repair Bay	Portable machinery, Petroleum Based HAZMAT, parts under pressure, stress, or tension, Acidic & Basic Chemicals	Eye hazard, burn hazard, hearing hazard, puncture hazard, crushing hazard	Safety goggles or safety goggles plus face shield, hearing protection, safety & steel shanked boots.
Weapons Cleaning Station	Weapons parts, portable hand tools, Petroleum Based HAZMAT, parts under pressure, stress, or tension	Eye hazard, puncture hazard, crushing hazard, blunt force trauma	Splash proof safety goggles or safety goggles plus face shield, safety & steel shanked boots.

I _____ certify that this PPE assessment is complete and accurate to the best of my knowledge.

Signature _____

Name _____

Date _____