

G-276

PPE CARE AND MAINTENANCE PROGRAM

G-276.1 PURPOSE & SCOPE

The PPE Care and Maintenance Program exists to ensure the proper selection, handling, care, maintenance and retirement of PPE (Personal Protective Equipment), and to identify and reduce the safety and health risks associated with the improper handling, care, maintenance and retirement of PPE. The program also establishes a procedure for handling any PPE involved in an event resulting in the injury or death of a member.

G-276.2 POLICY

The purpose of PPE is to provide the user with an envelope of protection from hazards and exposures. For the purposes of this policy, Firefighting PPE consists of a helmet, hood, jacket, trousers, gloves, wristlets and footwear.

G-276.3 REFERENCES

N/A

G-276.4 PROCEDURES

1. Selection of PPE

The evaluation and selection of PPE will be the responsibility of the PPE Program Manager of each department and will be based on a risk assessment and an evaluation of how well the PPE will perform based on that risk assessment.

2. Record Keeping

The department PPE Program Manager should maintain, and/or require contracted vendors to maintain, records on all structural firefighting PPE.

3. Inspection

The purpose of the inspection process is to determine serviceability by identifying damage that, if left unchecked, could result in a failure of that element. Elements found to be damaged should be immediately removed from service and evaluated by the Program Manager or his/her designee.

San Mateo County Fire Service
Policy & Guideline Manual

G-276

Inspections should be classified as Routine or Advanced.

Routine Inspection

A routine inspection is a brief inspection of all elements/components of PPE. Routine Inspections should be completed after each use, after exposure to an event that could have resulted in damage to the element, or as warranted.

Wildland gear will also be inspected in the same manner, and additionally at the beginning of wildland season.

The Routine Inspection should include inspection of the following:

Jacket and Trouser

- Soiling, contamination, or physical damage such as rips, tears, or cuts
- Damaged/missing hardware or closure systems
- Thermal damage such as charring, burn holes, or melting
- Damaged or missing reflective trim

Hood

- Soiling or contamination
- Physical damage such as rips, tears, or cuts
- Thermal damage such as charring, burn holes, or melting
- Loss of face opening adjustment/elasticity

Helmet

- Soiling or contamination
- Physical damage to the shell, such as cracks, crazing, dents, soft spots, or abrasions
- Thermal damage to the shell such as bubbling, soft spots, warping, or discoloration

San Mateo County Fire Service

Policy & Guideline Manual

G-276

- Physical damage to the ear flaps such as rips, tears, or cuts
- Thermal damage such as charring, burn holes, or melting
- Damaged or missing components of the suspension or retention system
- Damaged or missing components of the face shield/goggle system, including discoloration, crazing, or scratches to the face shield/goggle lens limiting visibility
- Damaged or missing reflective trim

Gloves

- Soiling or contamination
- Physical damage such as rips, tears, or cuts
- Thermal damage such as charring, burn holes or melting
- Inverted liner
- Shrinkage
- Loss of elasticity/flexibility

Footwear

- Soiling or contamination
- Physical damage such as cuts, tears, or punctures
- Thermal damage such as charring, burn holes, or melting
- Exposed/deformed steel toe, steel midsole, or shank
- Loss of water resistance

Advanced Inspection

An advanced inspection is a thorough inspection of PPE. Advanced Inspections are performed by department personnel that have had certified/proper training or by a manufacturer approved repair facility certified to conduct advanced inspections.

Advanced Inspections of PPE should be conducted at a minimum of every 12 months, or whenever routine inspections indicate that a problem may exist. An Advanced Inspection should also be completed prior to any element being returned to service

San Mateo County Fire Service

Policy & Guideline Manual

G-276

from Advanced Cleaning, Specialized Cleaning, or Repair. The findings of the advanced inspection should be documented and retained by PPE program manager.

4. Cleaning

Soiled or contaminated PPE should not be brought into the living quarters, the interior cab of departmental vehicles, personnel's home, personal vehicle, washed in home laundries or washed in public laundries.

- Always use universal precautions (latex gloves & mask) when handling soiled and contaminated PPE
- Never use chlorine bleach or chlorinated solvents to clean or decontaminate PPE
- Clean shells and liners separately to prevent damage and cross contamination

Cleaning should be classified as Routine, Advanced or Specialized.

Routine Cleaning

Routine Cleaning is a light cleaning performed by the user without taking PPE out of service. Routine Cleaning is the responsibility of each member and should be completed following an event that results in soiling or contamination, or otherwise as warranted.

- Initiate cleaning at the incident scene when possible
- Brush off any dry debris
- Gently rinse off debris with water
- Gently scrub with a soft bristle brush and rinse off again if necessary
- Spot clean using a utility sink if necessary
- Inspect for soiling and contamination
- Repeat cleaning process if necessary
- Air-dry all elements in an area with good ventilation, out of direct sunlight

If routine cleaning fails to render the PPE sufficiently clean for service, advanced cleaning is necessary.

San Mateo County Fire Service

Policy & Guideline Manual

G-276

Advanced Cleaning

Advanced cleaning is the thorough washing of PPE with cleaning agents, using department extractors or by a certified facility.

- Advanced Cleaning is required every twelve months, or after an event that results in soiling to the extent that routine cleaning cannot handle
- Wash according to instructions in PPE Care per manufactures instructions
- When washing is complete, hang dry all components
- All Advanced Cleanings shall be documented.

Specialized Cleaning (Hazardous Material Exposure)

Specialized Cleaning should be performed when PPE has been, or suspected to have been, contaminated with a hazardous material or biological agent. Specialized Cleaning should be performed by a certified facility. Contaminated PPE should be removed from service, isolated, bagged, and tagged.

5. Repairs

All PPE repairs should be performed by a certified repair facility. All elements should be subject to an advanced or specialized cleaning before being sent out for repair.

6. Issuing

The department PPE Program Manager should issue all PPE, and employees should only use Department issued PPE.

All safety personnel should be issued at least two sets of PPE. Issuing of second helmet and turnout boots will be department discretion.

G-276

7. Storage

Fire Department personnel should make every effort not to wear PPE inside station living quarters. While on duty, PPE should be kept on or near the apparatus when not in use.

PPE ensembles or elements should:

- Be clean and dry before storage
- Not be stored in direct sunlight or exposed to direct sunlight while not being worn
- Not be stored in air tight containers unless new and unissued
- Not be stored at temperatures below -40 F or above 180 F
- Not be subjected to sharp objects, tools, or other equipment that could damage the ensemble or elements
- Not be stored in contact with fluids, solvents, fuels, fuel vapors or other contaminants
- **Not be stored inside Fire Department living quarters.**

8. Retirement and Disposal

PPE should be retired and removed from service when:

- Worn or damaged to the extent that it can no longer be repaired
- It has exceeded 10 years of service or date of manufacture
- Contaminated to the extent that decontamination is not possible, safe, or cost effective
- When recommended by a certified repair facility

PPE that has been retired should be destroyed or disposed of in a manner that prevents its use. Elements that have been retired but are still serviceable may be used for training, provided that the training does not involve live firefighting.

San Mateo County Fire Service
Policy & Guideline Manual

G-276

9. Procedures for events involving injury or death

If any member of the Fire Department suffers serious injury or death while wearing PPE:

- The PPE will be immediately removed from service
- Custody of the PPE will be maintained by the Fire Chief or his/her designee and shall be kept in a secure location with controlled and documented access
- The PPE should be nondestructively tagged and stored only in paper or cardboard containers to prevent further degradation or damage. Plastic or airtight containers should not be used
- The PPE will be made available to qualified members of the department or outside experts, as approved by the Fire Chief, to determine the condition thereof
- The Fire Chief should determine retention time of the PPE