



Division 08

Health and Safety

Chapter 13 – Personal Protective Equipment

March 2009

POLICY

This General Order shall establish standards for personal protective equipment worn by Fire Department personnel to ensure maximum safety and identification during emergency fire/rescue operations.

The proper utilization of protective equipment is vital to the safety of personnel and is mandatory. The Fire Department is committed to providing quality protective equipment.

Members shall use and maintain all protective equipment in accordance with Departmental procedures and manufacturer specifications.

DEFINITIONS

N/A

PROCEDURES

1. Personal Protective Equipment Requirements

The use of personal protective equipment will be MANDATORY AS A CONDITION OF EMPLOYMENT/MEMBERSHIP when specified by the Department for hazard protection.

- Supervisors will be held accountable for allowing personnel to work without prescribed equipment.
- The Risk Management Office’s review of injuries will emphasize accidents resulting from failure to use protective equipment.

Regulation personal protective equipment shall consist of a helmet, turnout coat, and turnout pants with approved boots, gloves, Nomex hood, and Self-Contained Breathing Apparatus (SCBA).

Bureau of Logistics and Supply shall ensure that PPE properly fits each employee/member, according to NFPA standards, before issuance. If PPE needs alteration to ensure proper fit, this shall be coordinated through Logistics by an approved vendor, and the PPE shall not be issued until alterations are made.

High visibility vests are required when personnel are engaged in non-firefighting operations on a roadway. SCBA shall be worn at all times while engaged in any operation in an atmosphere that is imminently dangerous to life or health (IDLH), as defined in General Order 06-01. SCBA shall continue to be worn on all incidents until such time as the Incident Commander has determined:

- That there are no hazardous materials or toxic products of combustion present, or
- Personnel are not operating in an oxygen deficient atmosphere.

Only protective clothing and equipment issued or approved by the Prince George’s Fire Department may be used by personnel on any fire/rescue incident. Protective clothing and equipment will be in compliance with current editions of the National Fire Protection Association (NFPA) and the Occupational Safety and Health Administration Standards (OSHA).



With the approval or concurrence of the Incident Commander, officers-in-charge (OIC) may allow members to remove turnout coats and pants at non-fire emergencies and when overhauling at fire scenes provided the removal of such turnout coats and pants does not endanger such members.

On other emergency incidents not involving interior structural firefighting, the OIC may determine the appropriate level of protective clothing to be worn. The safety of fire/rescue personnel shall be the prime consideration for making this determination. Full PPE (helmet, turnout coat, gloves [firefighting, or as listed below], turnout pants, and boots) shall be worn by all members while engaged in automobile extrication activities. Full PPE ensemble, including SCBA, shall be worn by all members during automobile fires, and on other exterior fire incidents as determined by the Incident Commander. The appropriate level of protection shall apply to all members operating on the incident, regardless of company, bureau, assignment, or rank.

Turnout pants with approved boots shall be worn on all incidents that normally involve the hazards of thermal or steam burns, or exposure to hazardous materials such as:

- Structural firefighting operations.
- Vehicular or tank fires.
- Hazardous materials incidents.
- Natural gas leaks or fires.

The OIC shall have the discretion to allow personnel to remove turnout pants and wear either short rubber boots, three-quarter length rubber boots, approved leather firefighting boots, or approved (standard) leather work boots (with or without running pants) when conditions are safe to do so, such as:

- Brush fires (when conditions warrant).
- Rescue or medical emergencies.

- Vehicular accidents when not engaged in firefighting operations (High visibility vests are required when working on a roadway).
- Outside trash fires (when conditions warrant).
- Other situations when the safety of personnel is not jeopardized.

Three-quarter length boots or approved leather boots may be worn by exterior command officers in lieu of turnout pants and short boots.

Apparatus operators are not required to wear their Personal Protective Equipment while driving. However, full PPE ensemble must be worn when involved in operations away from the vehicle. This will include SCBA when operating in or near an IDLH atmosphere.

NFPA and American National Standards Institute (ANSI) approved eyewear shall be issued to all personnel as part of the standard issue helmet. Additionally, such eyewear may be obtained on an as-needed basis to replace the flip down face shield on previously issued helmets.

The goggles may be removed from the helmet and carried in a pocket of the turnout gear until such time as they are needed. Eye protection shall be required during any activity which may result in falling or flying debris. The SCBA face-piece with the regulator attached is considered full eye protection. Members may use safety glasses during auto extrications and other emergencies deemed appropriate by the Incident Commander, as long as they are NFPA/ANSI approved, and purchased at the member's expense.

However, if SCBA is not required, the goggles/approved eyewear must be worn.



2. Non-Issued Personal Protective Equipment

Approval and inspection of non-issued equipment shall be the responsibility of the appropriate volunteer chief or career supervisor utilizing the following guidelines:

- The only approved helmets other than standard issue from Logistics are: Cairns Sam Houston, Model N6A1, leather helmet with shell liner and approved eye protection, Cairns Classic 1000 and 1010, Cairns 1044 w/EES Innerzone 2 goggles, standard, the Kevlar or fiberglass composite version of the Sam Houston style, the Morning Pride Ben 2 Plus Fire Helmet.
- The only approved footwear for interior firefighting that meets the NFPA #1971 standard, other than standard issue from Logistics are: Pro Boot, by the Warrington Group, Black Diamonds, and Globe Magnum Fire Boots.
- Logistics is only issuing one type of firefighting glove. The only other approved firefighting glove is the Morning Pride/American Firewear Sleevemate gloves.

Issued rubber boots and gloves must be worn except as noted below:

- At the discretion of the OIC, the use of non-issued smooth toe (standard) leather work boots with steel toes and inner soles, which comply with current OSHA Standards, may be worn on non-firefighting rescue calls, brush fires, emergency care incidents, and service calls.
- If approved by the Unit OIC, non-issued OSHA certified leather work gloves purchased at the wearers

expense may be used on non-firefighting or rescue calls. (Example: working with winch cables, or engaged in high altitude rescues such as water towers or scaffolds.)

3. Protection Level Requirements

Fire and rescue apparatus is fully enclosed when it includes a full roof and doors at all riding positions.

Approved hearing protection will be worn on all apparatus.

Personnel riding in tiller positions shall wear full running gear while responding on all emergency incidents.

- On trucks equipped with fully enclosed tiller compartments (with compartment secured) the tiller-man may dispense with the use of protective clothing while driving, if approved by the OIC.
- On non-emergency conditions, the OIC of tiller trucks may allow the tiller-man to remove protective gear except for the helmet.

On ambulances, sedans, and utility vehicles, the wearing of protective clothing is optional. Riding on the back step of apparatus is prohibited.

The following guide is to be used by the OIC to determine the appropriate level of protective clothing to be worn at all times.

Participants in the Ride-Along Observer Program shall wear an orange fire helmet clearly marked "Observer." They are not to engage in any actual firefighting or rescue operations and shall not be required to wear full protective clothing as outlined above.



*The Unit OIC has the discretion to allow the removal of running coats when the safety of personnel is not endangered.

4. Standardized Markings

Helmets

Only issued and approved markings will be allowed on helmets. Helmet distribution will be as follows:

- Career Firefighters and Fire Technicians will wear yellow helmets with the appropriate reflective striping, 2" wide around the bonnet.
- Emergency medical, rescue personnel and Paramedic personnel will be issued blue helmets with appropriate striping when their existing helmets are replaced. Existing helmets must be yellow with blue reflective striping, 2" wide around the bonnet.
- Probationary Firefighters, those not yet acquiring Firefighter I, will wear red helmets with appropriate striping.
- Observers, those personnel participating as ride along/observer, will wear orange helmets clearly marked "observer" with the appropriate striping, 2" around the bonnet.
- Volunteer Firefighters who have successfully acquired Firefighter I shall wear yellow helmets with the appropriate striping, 2" wide around the bonnet.

Command Officer Rank Identification

Assignment designation initials or numbers will be worn on the sides of the helmet as indicated in Attachment #1. Assignment designations will be indicated by reflective labels issued by the Bureau of Logistics and Supply.

Officer rank designation will be indicated on each side of the bonnet as illustrated in Attachment #1. Volunteer Command Officer Ranks may be indicated as illustrated in Attachment #1.

Assignment and Rank Designations

Numeral and letter sizes shall be 2". Designations requiring more than double numerals or letters will be permitted on an adhesive label. All numerals and letters will be reflective gold with black outline.

Helmet shields will be on printed reflective labels as indicated in Attachment #1. Volunteer companies may purchase their own reflective shield labels with the approval of the Fire Chief.

Leather shield fronts may be worn, and may include the member's ID#, rank, and/or Company number. However, these optional shield fronts will be purchased at the member's expense, and will maintain a presentable and professional appearance at all times.

Temporary or acting duty assignments for extended periods will be indicated by using a temporary rank shield on the present marked helmet.

Example: Lieutenant shield on yellow 660C to indicate Acting Lieutenant rank.

Bomb Squad Personnel – Certified personnel are those assigned to the Fire Department Bomb Squad. The Bomb Squad helmet markings shall be reflective gold with black outline.

Certified personnel shall wear the marking "BOMB SQUAD" and their designated identification number centered on each side of the helmet (See Attachment #1).



Haz Mat Personnel – Certified personnel are those who have completed the Prince George's County Hazardous Materials Certification Program. The Haz Mat helmet markings shall be red reflective; letter and numeral sizes shall be 1".

Level II – Certified personnel shall wear the marking HM II centered on the back of the helmet brim (See Attachment #1).

Level III – Certified personnel shall wear the marking HM III centered on the back of the helmet brim (See Attachment #1).

5. Personal Protective Equipment Maintenance

All personal protective equipment is subject to inspection and removal from service at the discretion of the officer-in-charge.

Helmet Maintenance

Do not alter the helmet in any way. Use only accessory equipment of the type included in the original helmet or as approved by the manufacturer.

Do not paint the helmet shell without complying with written instructions from the helmet manufacturer.

Helmets shall be kept clean. Use mild solvents such as ethyl alcohol or mild detergent (Winsol Equipment Cleaner and Spot Remover). Maintain in accordance with the manufacturer's instructions.

Do not wash with strong solvents or cleaning agents such as tar remover acetone, paint or lacquer thinner, or any other chlorinated organic solvents.

Avoid prolonged storage in direct sunlight.

Do not neglect the interior fittings, especially the suspension. Remove and examine impact cap for damage to the foam core.

Inspect the interior fittings regularly. Replace worn or dirty suspension laces.

Continuously inspect face shield to ensure integrity, replace as required.

Check all mechanical hardware for proper adjustment regularly. All screws and nuts must be tight. Face shield clutch mechanism should be in proper tension. Chin straps and buckles should be checked for corrosion.

Turnout Coats and Pants

Only issued and approved markings will be allowed on turnout coats and pants.

All turnout coats and pants will have reflective tape stripes to enhance visibility.

Three inch (3") letters, "PG" will be placed on each shoulder. "PGFD" will be placed on the back of all turnout coats. This will serve to easily distinguish members of our system from mutual aid companies and deter theft. (Attachment #2)

Volunteer companies may have Logistics affix their company's name/initials/company # (maximum of 10 characters/spaces), if desired, on the back of the coat, using issued reflective numerals and letters (Attachment #2). This will be at the individual member's or Company's expense.

Yellow Nomex or PBI/Kevlar turnout coats will be worn by Firefighters, Fire Technicians, and line officers; all command officers will wear white Nomex coats.



All turnout coats and pants will be kept clean and in a proper state of repair.

Keeping the turnout coat and pants clean increases the life expectancy and ensures the desired flame resistance. Abrasive flammable dirt and contaminants detract from the personal protective equipment designed performance standard. All gear should be cleaned on an annual basis, or when necessary, such as after exposure to hazardous materials, blood borne pathogens, or petroleum products. Gear shall only be cleaned or repaired by the Department's certified vendor. Career supervisors and Volunteer Chief Officers will be responsible to inspect the PPE of all employees/members under their command on a monthly basis.

REFERENCES

N/A

FORMS/ATTACHMENTS

Attachment 1 – Helmet Illustration

Attachment 2 – Coat Illustration



